The mechanism of magnesiothermal ... S/598/61/000/006/002/034
D245/D303

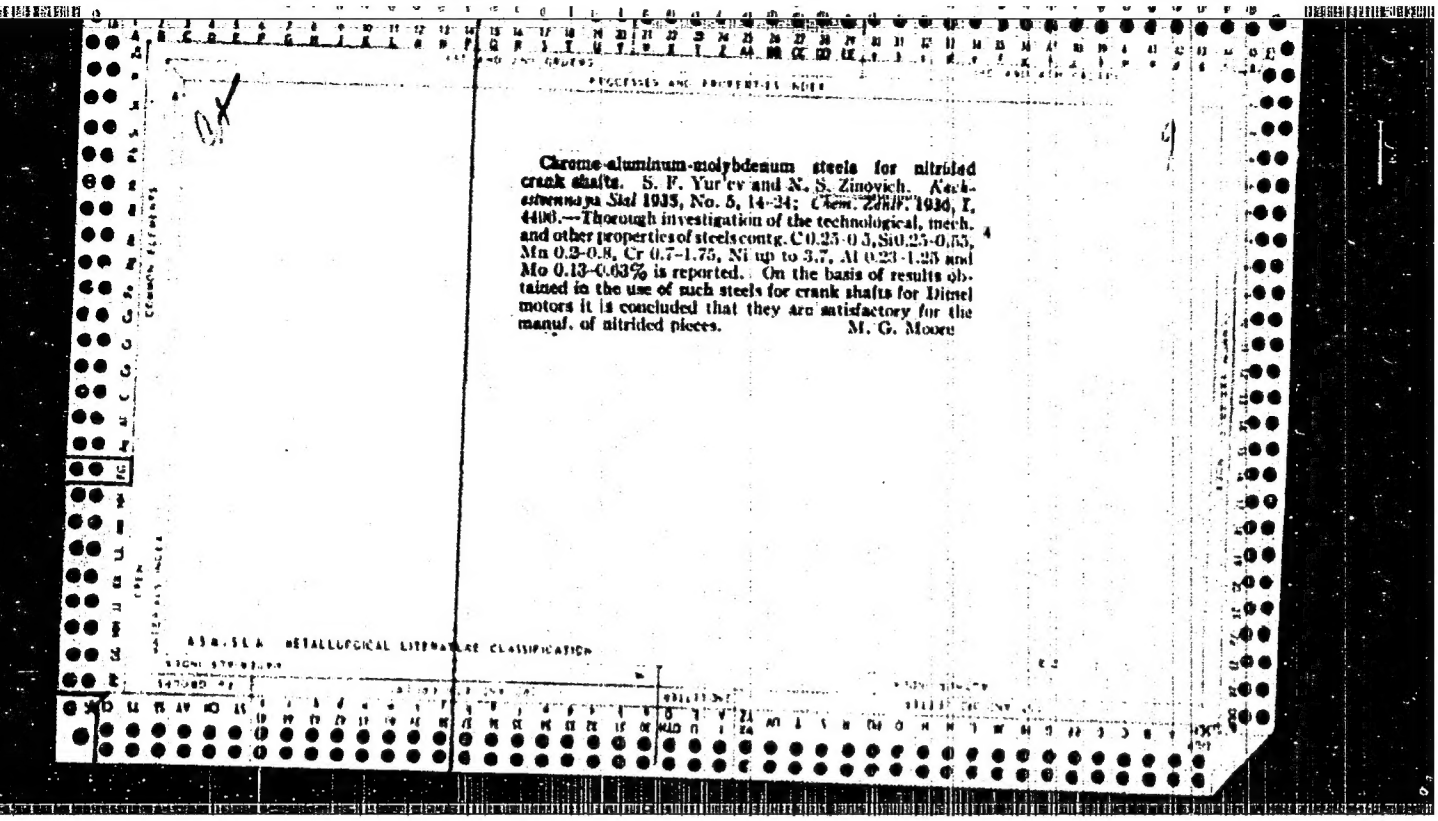
of the sponge, the lining becomes larger and the role of surface-diffusion processes and secondary chemical reactions becomes more marked. In the third stage ($TiCl_4$ consumption $\geq$ 80 %), the volume of the reaction mass increases at the expense of the lining. $TiCl_4$ reduction is gradual with intermediate formation of Ti sub-chlorides and their final reduction to metal. There are 3 figures and 8 references: 6 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: F.S. Wartman and J. Oth, J. Electrochem. Soc., 1954, v. 101, no. 10; W.J.Kroll, Metal Industry, 1955, v. 27, nos. 4-9.

Card 2/2

LUKASHENKO, E.Ye.; ZINOV'YEVA, N.K.; TEREKHIN, V.P.; FEOFANOV, L.P.

Mechanism of the thermochemical reduction of magnesium and the formation of titanium sponge in industrial reactors. Titan i ego splavy no.6:14-20 '61. (MIRA 14:11)

(Titanium--Metallurgy)



Chrome-aluminum-molybdenum steels for nitrided crank shafts. S. F. Yur'ev and N. S. Zinovich. *Kachestvennaya Stal* 1935, No. 5, 14–34; *Chem. Zentr.* 1936, I, 4406.—Thorough investigation of the technological, mech. and other properties of steels contg. C 0.25–0.3, Si 0.25–0.55, Mn 0.3–0.8, Cr 0.7–1.75, Ni up to 3.7, Al 0.23–1.25 and Mo 0.13–0.63% is reported. On the basis of results obtained in the use of such steels for crank shafts for Diesel motors it is concluded that they are satisfactory for the manuf. of nitrided pieces. M. G. Moore

ZENOV'IEVA, O. G.

PA 3/50T88

USSR/Physics - Phosphorescence 11 Sep 49
Benzene

"Influence of a Solvent Upon the Phosphorescence of Benzene and Certain Aromatic Acids at the Temperature of Liquid Oxygen," O. G. Zinov'yeva, 4 pp

"Dok Ak Nauk SSSR" Vol LXVIII, No 2

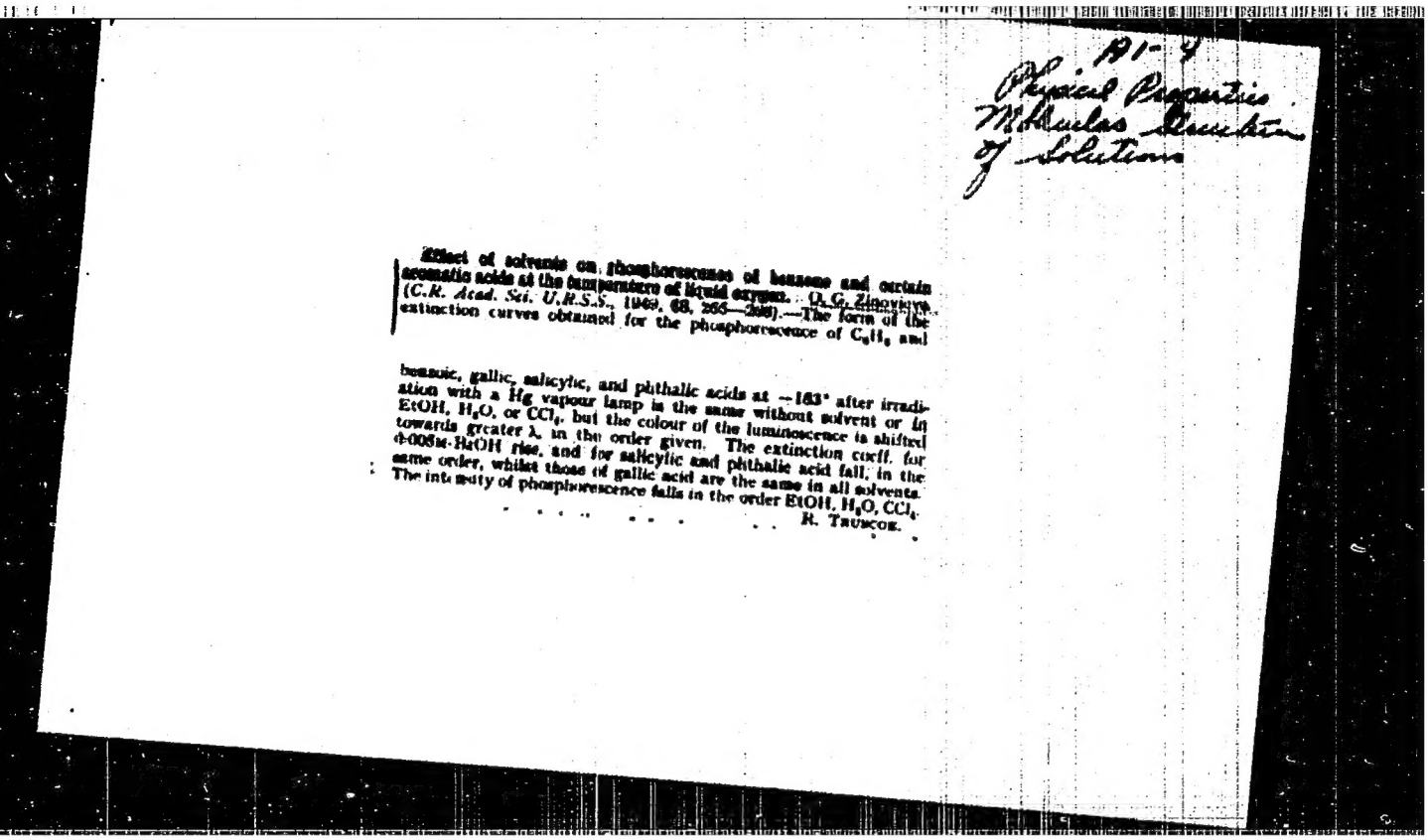
Studied solutions of benzene, benzoic acid, gallic acid, salicylic acid, and phthalic acid in alcohol ether, and carbon tetrachloride. Placed solutions in a 6-cm diameter vessel, immersed in liquid oxygen. On preliminary cooling by oxygen, they

3/50T88

USSR/Physics - Phosphorescence (Contd) 11 Sep 49

were excited by light of a 375-watt mercury lamp (PRK-2) for 15 sec. Primary result was that solvents did not influence curves of phosphorescence quenching in substances studied. Law of quenching these substances remained exponential. Submitted by Acad S. I. Vavilov 9 Jul 49.

3/50T88



P1-4
Physical Properties
Molecular Association
of Solutions

Effect of solvents on phosphorescence of benzene and certain aromatic acids at the temperature of liquid oxygen. O. G. Zinovieva. (*C.R. Acad. Sci. U.R.S.S.*, 1949, 68, 265—268).—The form of the extinction curves obtained for the phosphorescence of C_6H_6 and benzoic, gallic, salicylic, and phthalic acids at −183° after irradiation with a Hg vapour lamp in the same without solvent or in EtOH, H_2O, or CCl_4, but the colour of the luminescence is shifted towards greater λ, in the order given. The extinction coeff. for 0·008M-EtOH rise, and for salicylic and phthalic acid fall, in the same order, whilst those of gallic acid are the same in all solvents. The intensity of phosphorescence falls in the order EtOH, H_2O, CCl_4.

R. Truscott.

ZINOV'YEV

USSR/Physics - Phosphorescence
Low Temperature Research
Feb 50

156T98

"Damping of Phosphorescence in Alcohol Solutions of Several Very Simple Aromatic Compounds at the Temperature of Liquid Oxygen," O. G. Zinov'yeva, Gor'kiy Eng Constr Inst, 7 pp

"Zhur Eksper i Teoret Fiz" Vol XX, No 2

Studies 16 compounds: six phenols, six aromatic hydrocarbons, and four aromatic acids. Finds damping to be exponential. Average duration of excited state in molecules of substances studied depends on nature and position of substitution groups introduced into benzene ring and does not equal average duration of excited state in molecules of pure substances. Color of luminescence of the solutions also differs from that of pure substances. Submitted 14 Jul 49.

USSR/Physics - Phosphorescence (Contd) Feb 50

156T98

156T98

ZIKOV'YEVA, R.V.; IVANOVA, Z.G.; KORSAKOV, I.V.; SERGEYEV, A.P.

Vacuum cooling of neutralized products. Gidrolis. i lesokhim. prom.8 no.5:19-21 '55. (MLRA 9:1)

1.Kanskiy gidrolizayy zavod.
(Wood--Chemistry)

PLOTNIKOV, A.Ya.; GNEZDOV, V.I.; ZINOV'YEVA, R.V.

Using the flotation method for the recovery of tall oil. Gidroliz. i lesokhim.prom. 15 no.1:7-9 '62. (MIRA 18:3)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut.

ZINOV'EVA, S.M.

Work practice in industrial sanitation supervision by the Rostov-on-Don Municipal Station for Sanitation and Epidemiological Control.
S.M. Zinov'eva, A.V. Bununova, L.F. Rubanova. Gig. i san. no. 11:45-47 N '53.

ZINOV'YEVA, S.M.; BUZUNOVA, A.V.; RURANOVA, L.F.

Work practice in industrial sanitation supervision by the Rostov-on-Don Municipal Station for Sanitation and Epidemiological Control. Gig.i san. no.11:45-47 N '53. (MLRA 6:10)

1. Rostovskaya-na-Donu gorodskaya sanitarno-epidemiologicheskaya stantsiya. (Rostov-on-Don--Industrial hygiene)

ZINOV'YEVA, T.

Recently organized. NTO 2 no.6:61 Je '60. (MIRA 14:2)

1. Predsedatel' fabkoma pryadil'no-tkatskogo kombinata "Krasnoye Znamya," g.Ramenskoye, Moskovskoy oblasti.
(Ramenskoe--Textile industry)

ZINOV'YEVA, T.K., inzh.

Efficiency of treating cotton and staple fibers with oil and emulsions. Tekst.prom. 19 no.8:66-69 Ag '59.
(MIRA 13:1)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya Glavlenkhlopproma.
(Cotton finishing)

FRIDLYAND, L.A., kand. tekhn. nauk; ZINOV'YEVA, T.N., inzh.; KONOV, Yu.K., inzh.

Welding aluminum with titanium. Svar. proizv. no.11: 5-8 N'63.

ZINOVYEVA, T. N., KOLODNAYA, B. A., KONOV, Yu. K., (Engineers) and FRIDLYAND, L. A. (Cand. Tech. Sci.) (Moscow)

"Investigation of processes of joining titanium-aluminum and aluminum--steel" was devoted to a study of the behavior during dynamic loading of constructions, achieved by welding and by rolling and welding by explosion. A technology was developed which involved preliminary hard-facing on titanium of technically pure aluminum AV00 or AV000 either with calorizing or without it. Thickness of the layer of hard-facing is 5--8 mm. Welding is carried out by arc in argon by melted or unmelted electrode. Ultimate strength of joining OT4 with AMg6-11 is 27 kG/mm^2, angle of bend 17./30°.

Report presented at the 1st All-Union Conference on welding of heterogeneous metals, at the Inst of Electric Welding im. Ye. O. Paton, 14-15 June 1963. (Reported in Avtomaticheskaya svarka, Kiev, No. 9, Sept 1963, pp 95-96 author, V. R. Ryabov)

JPRS 24,651 19 May 64

ARKHANGEL'SKIY, B.N.; BELYAKOVA, Ye.Ye.; GUREVICH, M.S.; ZAYTSEV, I.K., red.; ZINOV'YEVA, T.V.; MITGARTS, B.B.; MOROZOV, V.M.; PETROVA, N.A.; RASPOPOV, M.P.; TOLSTIKHIN, N.I.; TOLSTIKHIN, O.N.; POTAPOV, V.S., red.; GUROVA, O.A., tekhn. red.

[Explanatory notes to a hydrochemical map of the U.S.S.R. on a scale of 1:5,000,000] Ob"iasnitel'naia zapiska k gidrokhimicheskoi karte SSSR v masshtabe 1 : 5,000,000. Red. I.K. Zaitsev. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1958. 138 p. (MIRA 11:7)

1. Leningrad. Vsesoiuznyy geologicheskiy institut.
(Water, Underground--Maps)

BRONEVITSKIY, V.P.; VISLENEV, M.V.; ZINOV'YEVA, U.Z.; MILYUGIN, A.M.; RASIN, B.I.; FEDOROV, A.A.; FEDOROV, A.D.; FEDOTOVA, A.Ye.; VOLKHOVER, R.S., tekhn. red.

[Central Museum of Communications named after A.S.Popov] TSentral'nyy muzei sviazi imeni A.S.Popova. Leningrad, 1962. 234 p. (MIRA 15:11)

1. Russia (1923- U.S.S.R.)Ministerstvo sviazi. (Leningrad—Communications museums)

L 24548-66 EWT(m)/EWP(j)/T/ETC(m)-6 IJP(c) WW/RM
ACC NR: AP6005404 (A) SOURCE CODE: UR/0323/65/000/005/0062/0067

AUTHOR: Zinov'yeva, V. A. (Engineer)

ORG: Moscow Textile Institute (Moskovskiy tekstil'nyy institut)

TITLE: Structure and strength of slightly stretching warp knitted glass reinforced fabrics

SOURCE: IVUZ. Tekhnologiya legkoy promyshlennosti, no. 5, 1965, 62-67

TOPIC TAGS: glass reinforced fabric, textile, textile industry

ABSTRACT: The prescribed strength of threads in warp-knitted glass reinforced fabrics can be increased by using lower-gage threads. The strength of slightly stretching warp-knitted glass-reinforced fabrics made from the same gage of thread depends on the kind of interweaving used. The strength of weft linens based on tricot increases with threadweft tightening during the process of knitting. The investigation was supervised by Professor A. S. Dalidovich. Orig. art. has: 5 figures and 1 table. (Summary) (NT)

SUB CODE: 11/ SUBM DATE: 15Dec64/ ORIG REF: 001/

Card 1/1 fv

ZINOV'YEVA, V.A., aspirant

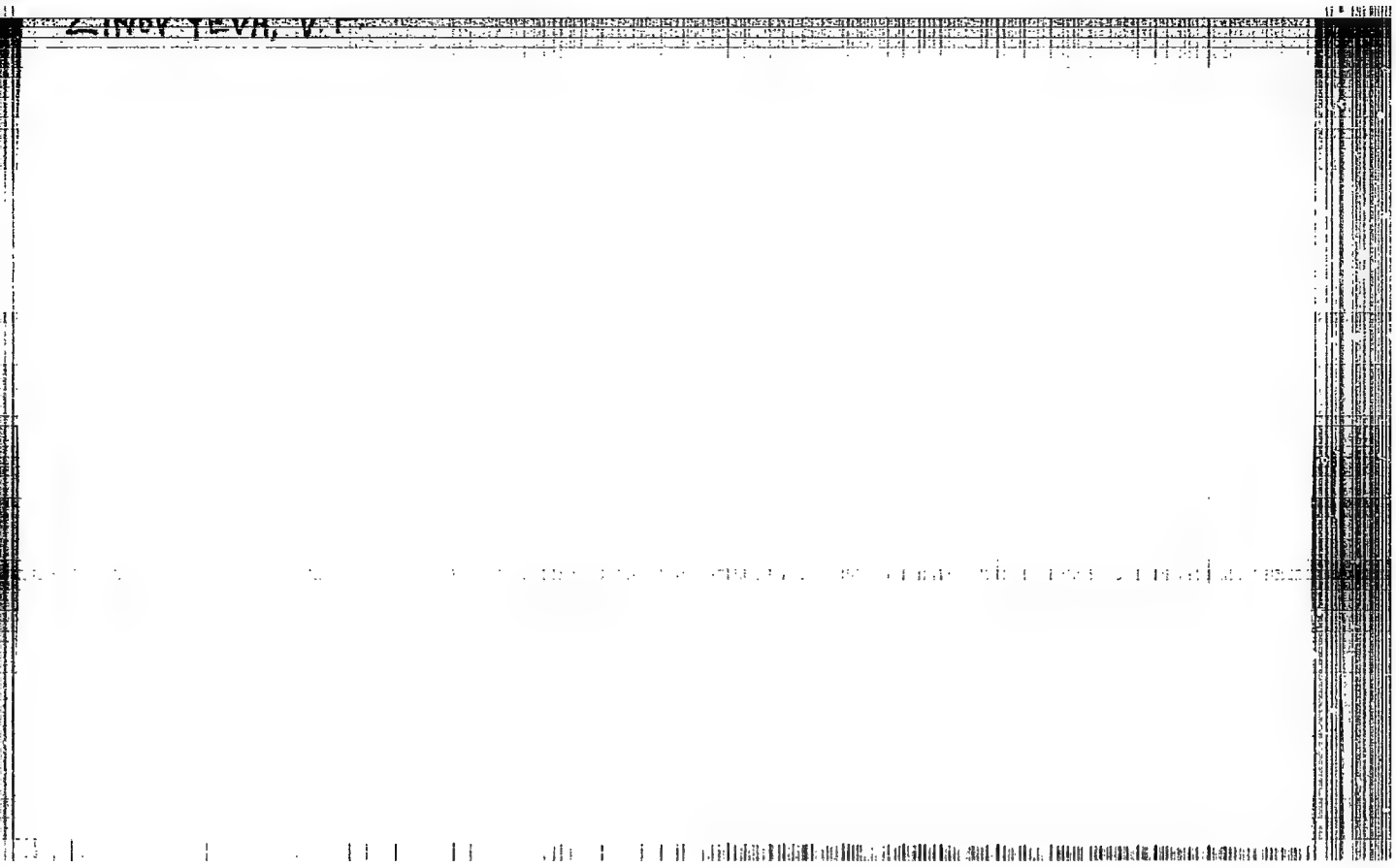
Processing of glass fibers on warp knitting machines. Tekst.prom. 24 no.1:61-64 Ja '64. (MIRA 17:3)

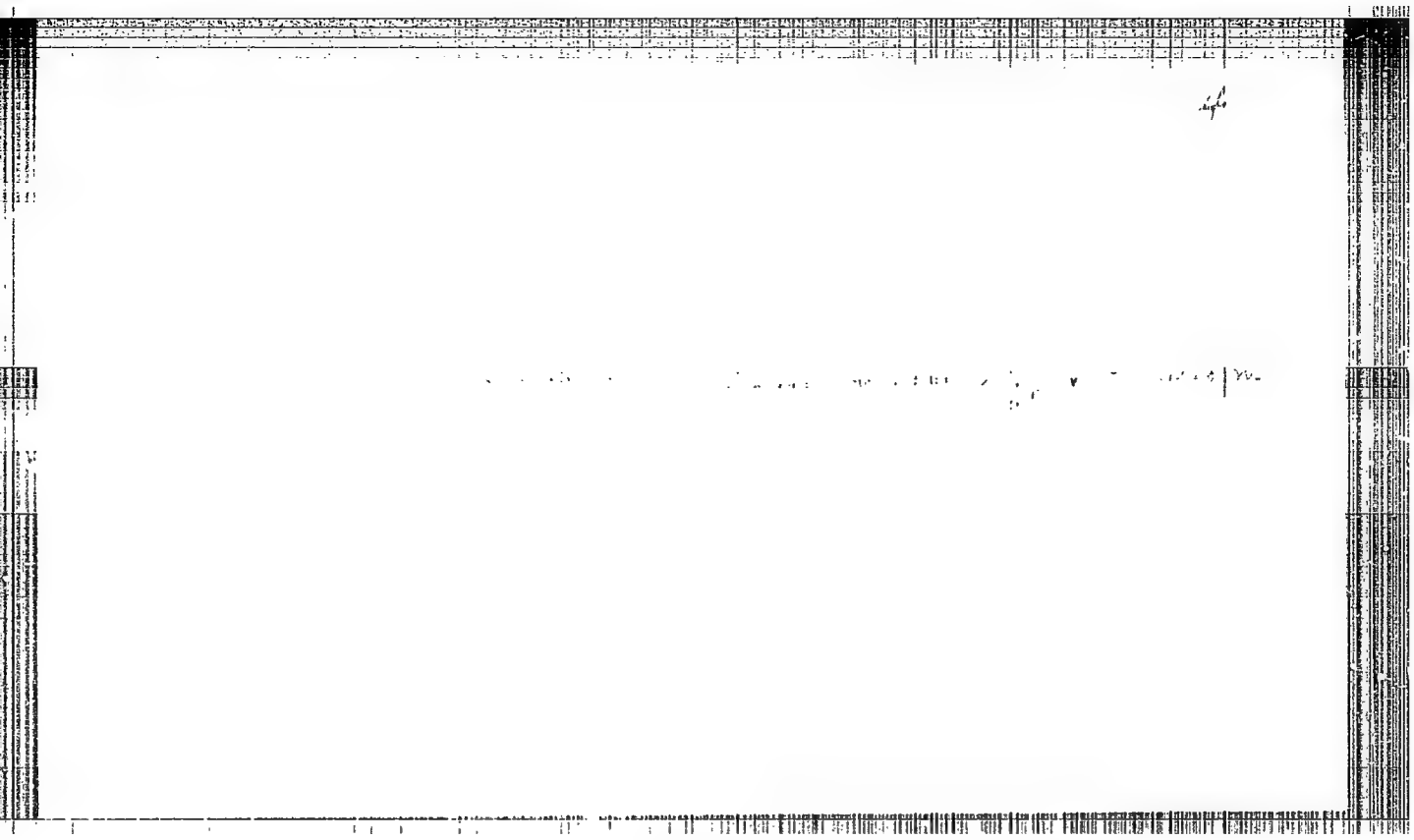
1. Moskovskiy tekstil'nyy institut.

MATUSEVICH, V.F., doktor veterinarnykh nauk, professor; ZINOV'YEVA, V.F., studentka.

Dechlorination of water. Veterinariia 33 no.4:69-70 Ap '56. (MLRA 9:7)

1. Dnepropetrovskiy sel'skokhozyaystvennyy institut.
(Water--Chlorination)





APPROVED FOR RELEASE: 07/16/2001 CIA-RDP86-00513R002065220019-4"

SHVEDOVA, V.P.; ZHILKINA, M.I.; ZINOV'YEVA, V.K.

New method for the quantitative separation of antimony. Radiokhimiia 1 no.1:109-111 '59. (MIRA 12:4)
(Antimony--Analysis) (Extraction (Chemistry))

ZINOV'YEVA, V.K.; ZHILKINA, M.I.; SHVEDOV, V.P.; YAKOVLEVA, G.V.

Method of extracting strontium from the soil and the determination of Sr^{90}. Radiokhimiia 1 no.5:613-615 '59. (MIRA 13:2)
(Strontium--Analysis)

33187

S/186/61/003/006/007/010
E051/E135

21.7200

AUTHORS: Shvedov, V.P., Zhilkina, M.I., and Zinov'yeva, V.K.

TITLE: The radiochemical determination of Cs^{137} in samples with low levels of radioactivity

PERIODICAL: Radiokhimiya, v.3, no.6, 1961, 732-736

TEXT: The determination of Cs^{137} in rain or snow and in aerosols is made difficult by the low level of activity (10^{-8} - 8 x 10^{-7} curies) and by the presence of other elements and organic compounds in the samples. By the use of an isotope dilution method with added carrier, Cs^{137} has been determined at low levels. Rain or snow was collected in a large, high walled, porcelain tank and one month's sample (30-60 ℓ) was evaporated. Air was filtered and the filters ignited. Cs carrier (10-15 mg) and carriers of Rb, Zr, Ce, Y and Sr (~ 5 mg each) were added to the residues. The mixture was heated with 20-25 mℓ of concentrated HCℓ in a porcelain dish and mixed thoroughly, then evaporated to dryness and baked at 100-110 °C for one hour to dehydrate SiO_2. This treatment was carried out two or three times.

Card 1/5

The radiochemical determination...

The residue was heated with 0.5N HCl and centrifuged. The solution thus obtained contained Cs together with Fe, Al, Ca, Mg, Na, K, Co, Cu, Ni, etc. Fe, Al and rare earth hydroxides were precipitated by the addition of 5-10% NH_4OH solution. After centrifuging the precipitate was washed two or three times with hot distilled water. To the supernatent solution combined with the washings was added $(NH_4)_2CO_3$ solution to precipitate alkaline-earth carbonates. The filtrate from the carbonate precipitation contained Cs, Mg, Na, K, Co, Cu, Ni and traces of other elements. The solution was acidified with HCl, 5 mg each of Fe, Ce, Y, Sr and Zr carriers was added and, after careful mixing, NH_4OH added to precipitate the hydroxides. This step was repeated three times. After the third hydroxide precipitation, the remaining solution was evaporated to low volume on a water bath and the residue treated with concentrated HNO_3 to decompose NH_4^+ salts. The dry residue contained Co, Cu, Ni, K, Mg, Na and Co. This was treated three to four times with concentrated HCl to convert the nitrates to chlorides and then

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The radiochemical determination ...

dissolved in 2-3 ml of distilled water. 7-10 ml of glacial acetic acid was added, the solution stirred and centrifuged. The residue was washed 2-3 times with 2 ml portions of glacial acetic acid and the supernated liquid and washings combined. 2-3 ml $KBiI_4$ solution (5 g Bi_2O_3 and 17 g KI in 50 ml glacial acetic acid) was added and the solution heated to boiling. After standing 40-60 minutes the precipitate was separated by centrifuging and washed with glacial acetic acid until the washings were no longer yellow. After a final wash with alcohol the precipitate was dried at 140-160 °C to constant weight. The chemical purity of the $Cs_3Bi_2I_9$ was checked by spectrographic analysis and showed no contamination by any likely radioactive element or Co and Cu. Traces of Ni, Mg, K and Na in quantities less than 1% were present. After reprecipitation of the $Cs_3Bi_2I_9$ none of these elements could be detected. The radiochemical purity of the recovered Cs^{137} was checked by β-decay curves and by γ-spectrometry. Following the β-decay curve over 12-20 months showed that no activity with a half-life of less than 5 years was present. γ-spectrometry was carried out using a single channel

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The radiochemical determination ...

scintillation counter with a sodium iodide crystal, measuring the 0.662 KeV Cs^{137} peak. The activity of Cs^{137} in the original sample was calculated using the formula

$$A = c \cdot n \cdot \frac{P}{p} e^{-\lambda t}$$

where: A - absolute activity in microcuries; C - counter efficiency in dis/min per microcurie for a given weight of precipitate; P - weight of Co carrier added to the original sample; p - weight of carrier recovered; λ - decay constant for Cs^{137}; t - mean time from collection of sample. Chemical yields were of the order of 60-70%. Using the procedure outlined it proved possible to determine 10^{-10} curie amounts of Cs^{137}, or greater, the whole procedure taking 5-8 hours.

Acknowledgments are expressed to Yu.M. Tolmachev for his assistance.

There are 2 figures, 1 table and 8 references; 6 Soviet-bloc, 1 Russian translation from a non-Soviet-bloc publication, and 1 non-Soviet-bloc.

Card 4/5

33187

The radiochemical determination ... S/186/61/003/006/007/010
E051/E135

The English language reference reads as follows:
Ref.7: H. Tadishi, Bull. Inst. Chem. Res., Kyoto Univ., v.37, 2, 126 (1959).

SUBMITTED: November 17, 1960

Card 5/5

X

SHVEDOV, V.P.; ZHILKINA, M.I.; ZINOV'YEVA, V.K.

Radiochemical determination of Cs^{137} in low activity samples.
Radiokhimiia 3 no.6:732-736 '61. (MIRA 14:12)
(Cesium—Isotopes)
(Radiochemistry)

GRAYEVSKIY, E.Ya.; ZINOV'YEVA, Ye.G.

On the possibility of changing the radiosensitivity of the cell by means of fluorochromes. Dokl. AN SSSR 118 no.3:476-478 Ja '58. (MIRA 11:4)

1.Institut morfologii zhivotnykh im. A.N. Severtsova Akademii nauk SSSR. Predstavleno akademikom A.I. Oparinym.

(FLUOROCHROMES) (RADIOACTIVITY--PHYSIOLOGICAL EFFECT) (INFUSORIA)

ZINOV'YEVA, Ye.M.

Conference devoted to the study of the discharge of small rivers.
Meteor. i gidrol. no.5:68 My '58. (MIRA 12:4)
(Rivers)

ZINOV'YEVA, Ye.G.

GRAYEVSKIY, E.Ya.; ZINOV'YEVA, Ye.G.

Effect of small quantities of ionizing radiation on paramaecium caudatum (a contribution to the problem of radiostimulation). Dokl. AN SSSR 110 no.3:379-382 S '56. (MLRA 9:12)

1. Institut morfologii zhivotnykh imeni A.N. Severtsova Akademii nauk SSSR. Predstavleno akademikom A.I. Oparinym.
(Radioactive substances--Physiological effect)

ZINOV'YEVA, YE. G.

AUTHORS: Grayevskiy, E. Ya., Zinov'yeva, Ye. G. 20-3-16/59

TITLE: On the Problem of the Possibility of Changing the Radio-Sensitivity of a Cell by Means of Fluorochromes (K voprosu o vozmozhnosti izmeneniya radiochuvstvitel'nosti kletki pri pomoshchi fluorokhromov)

PERIODICAL: Doklady AN SSSR, Vol. 118, Nr 3, pp. 476-478 (USSR) - 1958

ABSTRACT: The sensitation of biological objects for ionising radiation by means of fluorochromes would be of considerable interest for radio-therapeutics. Besides the finding of a correlation between the radio sensitivity of the cells and the hematoporphyrine, which is contained in them, would render possible the explanation of the mechanism of the initial reaction, which takes place under the influence of the radiation. In this connection the authors wanted to explain, how far this dye-like substance can change the radio sensitivity of a cell. The effect of the following dyes was investigated: Hematoporphyrine (0,001 - 0,005 %), trypaflavine (0,00002 - 0,0001 %), and fluorescine (0,00005 - - 0,0002 %). 300 parametia (parametsiya) in a 0,3 ml non-

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peptoneous medium (which contained the dye in one of the here given concentrations) and control-parametia of the same quantity and in the same medium, but without dye (control I) subjected in plexiglas cylinders to an action of X-rays (dose 100 kiloroentgen) once and at the same time. Also the other conditions of the irradiation are given. As second control for the darkness effect of the dye (control II) parametia were used, which were submerged for 60 minutes in the highest concentrations of the dye and which were not irradiated. The authors observed the velocity of cell division and the rate of survival of the animals. The results of these experiments are compiled in a table. An ionizing radiation of 100 kiloroentgen noticeably suppresses the tempo of the division of the infusoria on the first day after the action of the radiation. But the preparation velocity was normalized completely already on the second day. The here applied fluorescence-materials did not sensitize the infusoria against the Roentgen radiation. The dyes under the influence of 100 kiloroentgen did not become toxic either and the sensitivity of the irradiated parametia against the colours does not change noticeably in this case. The photo-

On the Problem of the Possibility of Changing the Radio-Sensitivity of a Cell by Means of Fluorochromes 20-3-16/59

dynamic effect is not very probable in case of irradiation with X-rays. According to the results found here the increase of the radio sensitivity of the organisms and tissues in the presence of fluorochromes is to be explained obviously by the summation of the effect of the ionizing radiations and of the chemical or photodynamical effect of th colour or of the pigment. There are 1 table and 9 references, 6 of which are Slavic.

ASSOCIATION: Institute for Morphology of Animals imeni A. N. Severtsov AN USSR (Institut morfologii zhivotnykh imeni A. N. Severtsova Akademii nauk SSSR)

PRESENTED: August 8, 1957, by A. I. Oparin, Member of the Academy

SUBMITTED: August 2, 1957

AVAILABLE: Library of Congress

Card 3/3

AUTHOR: Zinov'yeva, Ye. G. 20-118-4-19/61

TITLE: The Survival Rate of Paramecium Caudatum, as Dependent Upon Their Number per Unit of Volume, When Subjected to X-Rays (Zavisimost' vyzhivayemosti Paramecium caudatum ot ikh kolichestva v yedinitse ob"yema pri obluchenii rentgenovskimi luchami)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 4, pp. 694-697 (USSR)

ABSTRACT: In the beginning the author shortly refers to previous papers dealing with the same subject. The author simultaneously irradiated certain amounts of paramecia in small glass vessels containing 0,3 milliliters of Lozina-Lozinskiy-medium or of water with X-rays (180 kV, 15 milliampères, without filter, at a distance of 8'5 cm, dosage rate 3000 roentgen/min). The effect of doses of 50, 100, 150, 300 and 500 kiloroentgen was investigated. After irradiation every paramecia was exposed in 0'1 milliliters of non-irradiated nutritive solution. The surviving

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The Survival Rate of Paramecium Caudatum, as Dependent Upon Their Number per Unit of Volume, When Subjected to X-Rays

20-118-4-19/61

infusoria were recorded during the following days. A diagram illustrates the dependence of the rate of survival at a dosis of 100 kiloroentgen on the number of individuals. At a stipulated dosis it is possible to obtain every desired rate of survival as a function of the number of infusoria per volume unit with a sufficient degree of accuracy. At certain concentrations of the paramecia it is possible to obtain a survival rate of nearly 100 % with the here investigated doses of up to 500 kiloroentgen. The following empirical formula is obtained: $P = A \lg(y/y_o)$, P denoting the survival rate in %, y the number of paramecia contained in 1 ml of solution, A and y_i constants. In the case investigated here A takes the value of A = 44,6. y_o can be interpreted to denote the minimum number of individuals within a certain volume, which do not survive a given dosis. Instead of the formula given above it is possible to set $P = 44,6 \lg (v_o/v)$, v denoting the water volume per paramecia, with $V_o = 1/y_o$ holding. The survival rate of infusoria is linearly dependent upon the concentration of the infusoria in the dose range from 100—

Card 2/4

500 kiloroentgen. With good approximation $P = 100 - 44{,}6 \lg v(42{,}5\ D - 3000)$ is found, D denoting the dose in kiloroentgen. This formula does not apply to smaller doses and to lower numbers of individuals. The unfavorable effect of a great volume of irradiated medium can be explained in different ways: Probably the products of the metabolism of the parametia are diluted. Sorption processes of the caustic substances at the surface of the paramecia can also not be excluded. No sexual process with paramecia occurs on the conditions discussed here. The experimental data discussed here are an ideal model of a radiation damage, where the medium surrounding the cell is of decisive importance for the lethal outcome.
There are 4 figures, and 15 references, 5 of which are Soviet.

The Survival Rate of Paramecium Caudatum, as Dependent Upon Their Number per Unit of Volume, When Subjected to X-Rays 20-118-4-19/61

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute for Animal Morphology imeni A. N. Severtsov, AS USSR)

PRESENTED: October 21, 1957, by A. L. Kursanov, Member of the Academy

SUBMITTED: October 21, 1957

AVAILABLE: Library of Congress

Card 4/4

AUTHOR: Zinov'yeva, Ye. G. SOV/20-121-1-21/55

TITLE: On the Causes for the Death of Infusoria When Exposed to X-Rays (O prichinakh gibeli infuzoriy pod deystviyem rentgenovskikh luchey)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 1, pp. 80-83 (USSR)

ABSTRACT: The author investigated 1) the influence of an irradiated medium on not-irradiated paramecia to judge the toxidity of the substances forming in the medium by irradiation, 2) the influence on the organism immediately caused by the radiation when the toxic effect of the medium is blocked, and 3) the simultaneous action of radiation and toxidity of the medium. For this purpose the author investigated the effect of 2 simple irradiated media without any organic admixtures (Lozina-Lozinskiy medium and twice distilled water). The media were irradiated in little containers of molybdenum glass. The changes caused in an aqueous medium by radiation are stable. The employed irradiated media have the same toxic properties. If the toxic substance is removed or only diminished the rate of survival is 100%. Also when the infusoria in the irradiated medium are washed, trans-

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On the Causes for the Death of Infusoria When Exposed to X-Rays SOV/20-121-1-21/55

ferred into an unirradiated medium, and are irradiated then, they do not die. The following conclusions result from the present paper: 1) In aqueous solutions stable chemical changes form under the influence of x-rays; these changes are toxic for the paramecia. 2) The x-irradiated paramecia are more sensitive to the action of the aqueous medium which has been modified by the radiation. 3) An x-irradiated aqueous medium in which previously infusoria were contained exhibits a lower toxidity than irradiated pure water. There are 1 figure, 5 tables, and 13 references, 3 of which are Soviet.

PRESENTED: March 24, 1958, by A. L. Kursanov, Member, Academy of Sciences, USSR

SUBMITTED: March 22, 1958

1. Paramecium—Effects of radiation 2. Aqueous solutions—Effects of radiation 3. Radiation—Toxic effects 4. Aqueous solutions (Radioactive)—Toxic effects

Card 2/2

21(3)

AUTHORS: Grayevskiy, E. Ya., Zinov'yeva, Ye. G. SOV/20-121-5-19/50

TITLE: An Investigation of the Radiosensitivity of a Cell in a Repeated Influence of Ionizing Radiation (Issledovaniye radiochuvstvitel'nosti kletki pri povtornykh vozdeystviyakh ioniziruyushchey radiatsii)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 5, pp 837 - 840 (USSR)

ABSTRACT: The authors investigated the ability of unicellular organisms to heal radiation damage and to adapt themselves to such affections. These experiments were carried out on Paramecium caudatum, the method of the investigations was discussed in previous papers (Refs 1,2). The variations of the rate of cell fission and of the percentage of the surviving organisms of Paramecium caudatum after single and repeated irradiations were used as criteria. The unicellular organisms were irradiated by a dose of 100 000 r at a temperature of 0°C. After such an irradiation, all the organisms continued to live if

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transplanted into a non-irradiated medium. But the rate of the cell fission is diminished by 80% on the first day after the irradiation. After 2-3 days, the fission velocity is restored to its initial value. The variations of the radiosensitivity of the Paramecia under the influence of radiation were investigated by repeated irradiation of the same dose (100 000r). There were various intervals between the initial and the repeated irradiations. After repeated irradiation of the parameciae by 100 000r (in intervals of 3 and 6 hours, total dose 200 kr) the death rate amounted to 93 and 87%, respectively. But the slowing down of the fission velocity was not noticeably different from the parameciae which were irradiated only once. The authors then investigated the radiosensitivity for the case that the total dose of radiation is gradually increased. The decrease of the fission velocity did not depend on the total dose, it was caused by the immediately received dose. The survival rate of the infusories depends on the manner of irradiation

in a more complicated way. As a rule, the survival rate was not changed by repeated irradiations. But in some cases very distinct periods of especially high sensitivity were observed on the background of the monotonous reactions caused by any repeated irradiation. According to these results, the vegetative functions affected by the radiation are quickly and practically totally restored if the cell is transplanted into normal conditions. There are 2 tables and 3 references, which are Soviet.

ASSOCIATION: Institut morfologii zhivotnykh im.A.N.Severtsova Akademii nauk SSSR (Institute of Animal Morphology imeni A.N. Severtsov, AS USSR)

PRESENTED: May 25, 1958, by A.I.Oparin, Academician

SUBMITTED: April 19, 1958

GRAYEVSKIY, E.Ya.; ZIMOV'YEVA, Ye.G.

Effect of small doses of ionizing radiation on the survival and rate of division of Paramecium caudatum. Trudy Inst.morf.zhiv. no.24:160-171 '59. (MIRA 13:3)
(Radioactivity--Physiological effect)
(Paramecium)

ZINOV'YEVA, Ye. G., Cand Biol Sci -- (diss) "Role of indirect and continuous action of ionizing radiation in radiation sickness of the single-celled organism Paramaecium caudatum." Moscow, 1960. 21 pp; with flow-sheet; (Academy of Sciences USSR, Inst of Microbiology); 200 copies; price not given; (KL, 52-60, 119)

ACC NR: AT7002494 SOURCE CODE: UR/0000/66/000/000/0028/0035

AUTHOR: Zinov'yeva, Ye. G.

ORG: Institute of Biological Physics, AN SSSR, Moscow (Institut biologicheskoy fiziki AN SSSR)

TITLE: Investigation of the radioresistance of Paramecium caudatum during reconstruction of the nuclear apparatus

SOURCE: AN SSSR. Nauchnyy sovet Radiobiologiya. Vliyaniye ioniziruyushchikh izlucheniy na nasledstvennost' (Effect of ionizing radiation on heredity). Moscow, Izd-vo Nauka, 1966, 28-35

TOPIC TAGS: ~~radioresistance~~ irradiation resistance, x ray radiation biologic effect, radiation cell effect, microbiology

ABSTRACT: An investigation of Paramecium caudatum revealed that during their life cycle they have a state of low resistance to x-rays. The loss of radioresistance was found to be related to the process of reconstruction of the nuclear apparatus. At the stage of reorganization of the nucleus loss of radioresistance was observed after resorption of fragments of the old macronucleus. Systematic x-ray irradiation of paramecia induces in them a more frequent reorganization of the macronucleus than in the norm. In each individual paramecium radiation caused an increased frequency

Card 1/2 UDC: none

ACC NR: AT7002494

of reorganization of the macronucleus but the distribution in the culture of the number of paramecia simultaneously entering into reorganization is a statistical event. Thus, fluctuations in the survival rate of paramecium which were noted under irradiation are related to the fluctuation of the number of paramecia undergoing, at a given instant, any type of reorganization of the nuclear apparatus. Orig. art. has: 3 tables and 4 figures. [26]

SUB CODE: 06/ SUBM DATE: 01Sep66/ ORIG REF: 002/ OTH REF: 002
ATD PRESS: 5117

Card 2/2

ZINOV'YEVA, Ye.G.; KRIVISKIY, A.S.

Mutagenic effect of ultraviolet irradiation on the temperate phage 2. Genetika no. 6:16-23 D '65 (MIRA 19:1)

1. Institut biologicheskoy fiziki AN SSSR i Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR, Moskva.

ZINOV'YEVA, Ye.G.

Injury to paramecia caused by the products of water radiolysis at the instant of irradiation. Dokl.AN SSSR 145 no.6:1389-1392 Ag '62. (MIRA 15:8)

1. Predstavleno akademikom A.L.Kursanovym.
(INFUSORIA) (X RAYS—PHYSIOLOGICAL EFFECT)

PETROV, G.N., inzh.; ZINOV'YEVA, Ye.I., inzh.

Using local runoffs for supplying water to Tatar and Bashkir oil fields. Stroi. pred. neft. prom. 3 no.6:10-12 Je '58.
(MIRA 11:7)
(Bashkiria--Water supply) (Tatar A.S.S.R.--Water supply)(Oil fields)

ZINOV'YEVA, Ye. I.

ZINOV'YEVA, Ye.I., meditsinskaya sestra (Moskva)

Care of patients recovering from surgery on the lungs. Med.sestra 16 no.9:26-29 S '57. (MIRA 11:1)
(LUNGS--SURGERY) (NURSES AND NURSING)

ZIMOV'YEVA, Ye.M.

Zoning the layer of average spring runoff from the territory of the central Volga Valley. Izv. Kazan. fil. AN SSSR. Ser. energ. i vod. khoz. no.1:131-145 '57. (MIRA 11:10)
(Volga Valley--Runoff)

AUTHORS: Zinov'yeva, Ye. M., Petrov, G.N., Candidate of Technical Sciences SOV6-58-6-12/21

TITLE: On the Problem of the Construction of the Hydrographic Network on Topographic Maps (K voprosu ob izobrazhenii gidrograficheskoy seti na topograficheskikh kartakh)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 6, pp. 54 - 55 (USSR)

ABSTRACT: The hydrologic expedition of the Kazan' Branch of the AS USSR made hydrometric measurements of the small rivers of the Mariyskaya ASSR in 1951 and of the river Ryksha in the Chuvashskaya ASSR, a left tributary of the Tsivil', in 1952. On this occasion certain deficiencies in their representation were found. Also in the investigation of the rivers of the central Volga area considerable deficiencies were found in 1955. The investigations showed that in the course of the last ten years the number of dried-up rivers in some areas of the central Volga area has increased considerably. The reason for this phenomenon is the incorrect execution of some agricultural measures. The analysis of the deficiencies in the representation of the hydrographic network showed

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On the Problem of the Construction of the Hydrographic Network on Topographic Maps SOV/6-58-6-12/21

that these deficiencies are mostly caused by the lack of clear and exact determinations of the elements of hydrography. Some supplements to the existing signs are mentioned. The authors demand a method for the generalization of the representation of rivers as well as the elaboration of examples for the generalization of the river outlines.

1. Inland waterways--Properties 2. Mapping errors
3. Maps--Preparation

Card 2/2

ZINOV'YEVA, Ye.M.

Factors determining the spring runoff and calculation of its depth for uninvestigated rivers based on studies of the middle Volga Valley. Trudy Kazan. fil. AN SSSR. Ser. energ. i vod. khoz. no.4:96-103 '59. (MIRA 13:8)

1. Otdel energetiki i vodnogo khozyaystva Kazanskogo filiala AN SSSR.

(Volga Valley--Runoff)

MBR., DEPT. ENERGETICS & WATER CONTROL, KAZ SSR

50-58-5-20/20

AUTHOR: Zinov'yeva, Ye. M.

TITLE: Transactions of the Conference on the Problem of the Investigation of the Flow of Small Rivers (Soveshchaniye po voprosam izucheniya stoka malykh rek)

PERIODICAL: Meteorologiya i Gidrologiya, 1958, Nr 5, pp. 68-68 (USSR)

ABSTRACT: On November 26 - 28, 1957 a scientific-technical interregional conference was held in Kazan', It was called by the Department for water and Power Economy (Otdel Energetiki i vodnogo khozyaystva) of the Kazan' Branch of the AS USSR and was devoted to the 40-th anniversary of the October Revolution. 14 lectures were held which predominantly dealt with the problem mentioned in the title. In its resolution the conference emphasized the lack of flow charts and decided the necessity of compiling real charts for characterizing the annual flow. In this connection it was recommended to place the existing network of hydrometeorological stations in a more rational manner. Results of expeditions and systematic observations shall be more utilized. It was

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recommended to publish these results in hydrological periodicals (yearbooks). The organizations which carry on various water-economic objects shall continue the investigations begun by the project-organizations. The conference paid much attention to the connection between the surface and the underground waters and demanded a closer coordination of the works of the Ministry for Geology (Ministerstvo geologii) and the Chief Administration of the Hydrometeorological Service (Glavnoye upravleniye gidrometeorologicheskoy sluzhby).

1. Inland waterways 2. Fluid flow--Analysis 3. Scientific reports

Card 2/2

USCOMM-DC-60219

GUZ, R. (Leningrad); ZINOV'YEVA, Z. (Leningrad)

Economic council in a department store. Sov. torg. 36 no.1:28-29 Ja '63. (MIRA 16:2)
(Leningrad--Department stores)

BC

Products of the diene synthesis with piperylene and hexadiene. B. Arbuzov, Z. Zinovieva, and I. Fink (J. Gen. Chem. Russ., 1937, 7, [illegible]).—CHMe:CH·CH:CH$_2$ or CHMe:CH·CH:CHMe and CH$_2$:CH·CHO or CHMe:CH·CHO at 100° (?) yield 5-methyl- (I), 2 : 5-dimethyl- (II), or [illegible]-trimethyl-Δ³-cyclohexen-1-al (III), which condense with ketones to yield the following: β-2 : 5-dimethyl-Δ³-cyclohexenylvinyl Et, b.p. 132—135°/10 mm., Pr$^{\alpha}$, b.p. 15[illegible]—155°/10 mm., and isobutenyl ketone, b.p. 13[illegible]—140°/9 mm.; β-5-methyl-Δ³-cyclohexenylvinyl Et ketone, b.p. 140°/22 mm. With EtCHO, (I) and (II) are said to give 5-methyl-, b.p. 110—115°/20 mm., and 2 : 5-dimethyl-1 : 2 : 5 : 6-tetrahydrobenzylacetaldehyde, b.p. 120—125°/10 mm., respectively. (I) and CH$_2$N$_2$·CO$_2$Et lead to Et 5-methyl-1 : 2 : 3 : 6-tetrahydrocinnamate, b.p. 120—125°/12 mm. The Et, b.p. 117—119°/11 mm., and Bu$^{\alpha}$, b.p. 153—155°/9 mm., acetals of (II), and the Et acetal of (I), b.p. 91—93°/10 mm., are described. The following alcohols were obtained (Grignard reaction) from (II) or (III): 2 : 5-dimethyl-Δ³-cyclohexenyl-ethyl- (IV), b.p. 120—123°/28 mm., -n-propyl-, b.p. 120—123°/10 mm., -isobutyl-, b.p. 124—126°/10 mm., and -phenyl-carbinol, b.p. 167—169°/9 mm., and 2 : 5 : 6-trimethyl-Δ³-cyclohexenyl-ethyl-, b.p. 110—118°/15 mm., -n-propyl-, b.p. 118—120°/12 mm., and -isobutyl-carbinol, b.p. 132—135°/30 mm. (IV) and CrO$_3$ in aq. H$_2$SO$_4$ yield 2 : 5-dimethyl-Δ³-cyclohexenyl Et ketone, b.p. 100—102°/12 mm. (semicarbazone, m.p. 160°) R. T.

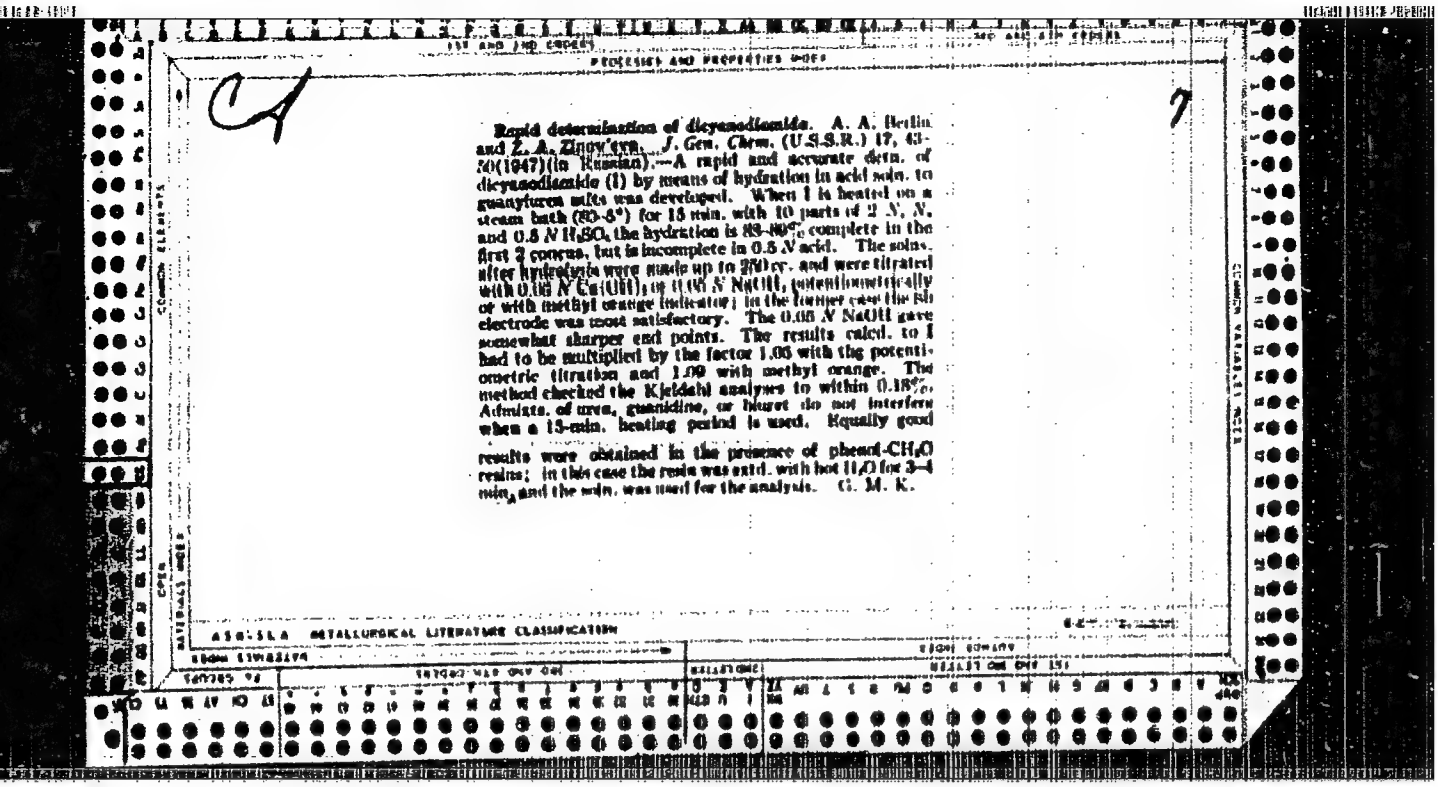
PROCESSES AND PROPERTIES INDEX

Z. ZINOV'EVA

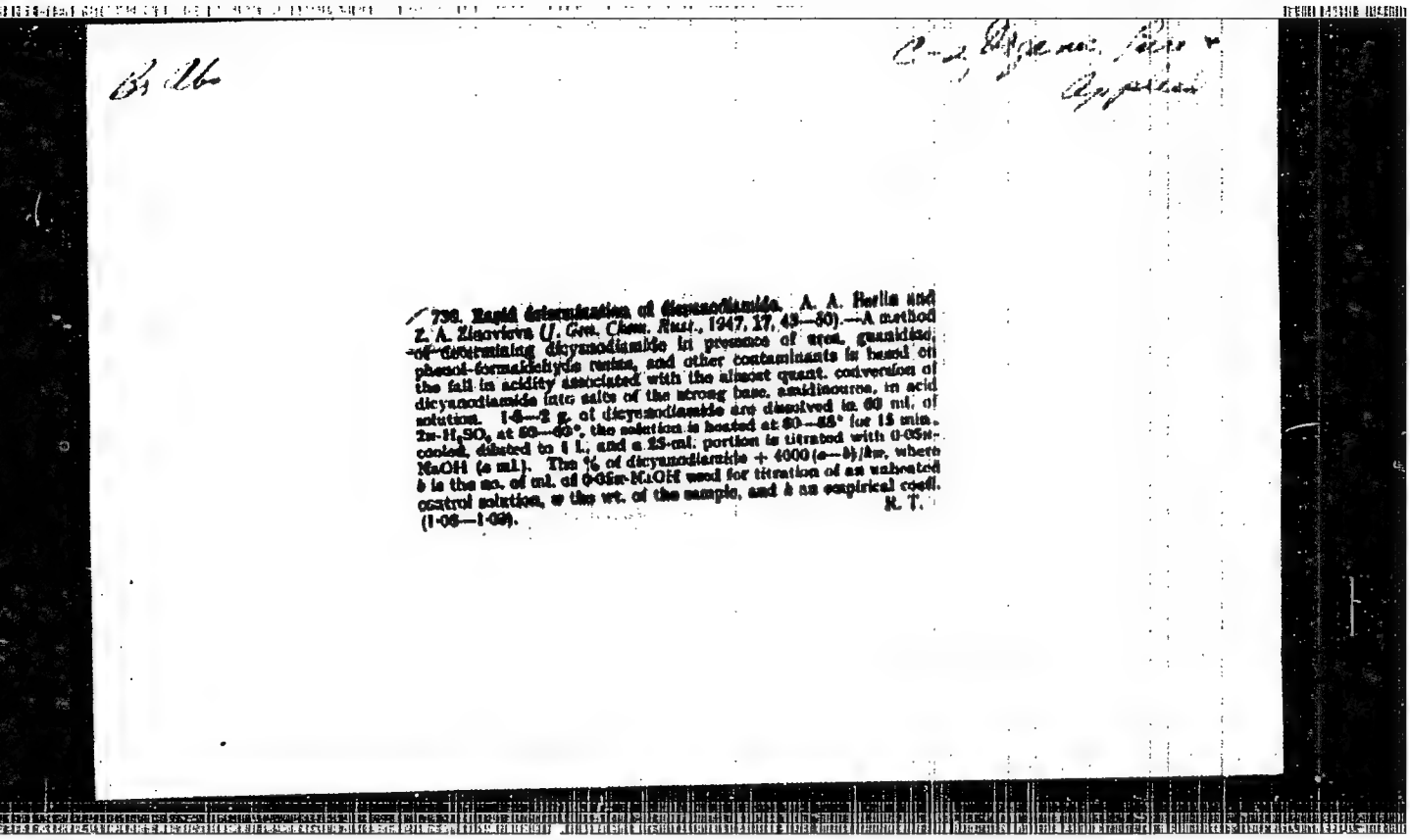
Some products of the diene synthesis with piperylene and hexadiene. B. Arbuzov, Z. Zinov'eva and I. Fink. *J. Gen. Chem.* (U. S. S. R.) 7, 2278-81(1937).—The hexadiene fraction of the bivinyl still residues from synthetic rubber manuf. condenses with acrolein to give 2,5-dimethyl-3-cyclohexen-1-al (I) and with crotonaldehyde to give 2,5,6-trimethyl-3-cyclohexen-1-al (II). The piperylene fraction and acrolein give 5-methyl-3-cyclohexen-1-al (III). I condenses with MeEtCO to form a ketone which is probably RCH:CHCOEt, but may be RCH:CMeCOMe (R = 2,5-dimethyl-3-cyclohexen-1-yl). It b_{14} 132-5°, d_4^{20} 0.9278, n_D^{20} 1.4930, M. R. 60.18. With MePrCO, I gives an analogous compd. which is either RCH:CHCOPr or RCH:CEtCOMe, b_{12} 154-6°, d_4^{20} 0.9143, n_D^{20} 1.4921, M. R. 65.36. I and mesityl oxide give RCH:CHCOCH:CMe$_2$, b_5 138-40°, d_4^{20} 0.9121, n_D^{20} 1.4980, M. R. 70.00. III and MeEtCO give R'CH:CHCOEt or R'CH:CMeCOMe, b_{14} 140°, d_4^{20} 0.9235, n_D^{20} 1.4883, M. R. 55.62 (R' = 5-methyl-3-cyclohexen-1-yl). I and EtCHO give RCH:CHCH$_2$CHO, b_{10} 120-1°, d_4^{20} 0.9433, n_D^{20} 1.4978, M. R. 51.00. III and EtCHO give R'CH:CHCH$_2$CHO, b_{10} 110-14°, d_4^{20} 0.9418, n_D^{20} 1.4810, M. R. 48.42, and some [illegible]. III condenses with EtOAc and Na to give R'CH:CHCO$_2$Et, b_{14} 124-5°, d_4^{20} 0.9828, n_D^{20} 1.4820, M. R. 57.44. The Et acetal of I, b_{14} 117-19°, d_4^{20} 0.9300, n_D^{20} 1.4570, M. R. 62.85; the Bu acetal, b_5 155-8°, d_4^{20} 0.9103, n_D^{20} 1.4611, M. R. 81.57. The Et acetal of III, b_{14} 91-3°, d_4^{20} 0.9260, n_D^{20} 1.4544, M. R. 57.95. By the Grignard reaction with I the following alcs. are prepd.: RCH(OH)Et (IV), b_{10} 120-3°, d_4^{20} 0.9140, n_D^{20} 1.4825, M. R. 51.20; RCH(OH)Pr, b_{10} 130-2°, d_4^{20} 0.9200, n_D^{20} 1.4830, M. R. 56.01; iso-BuCH(OH)R, b_{10} 124-6°, d_4^{20} 0.9078, n_D^{20} 1.4844, M. R. 59.97. RCH(OH)Ph, b_5 162-4°, d_4^{20} 1.0100, n_D^{20} 1.5405, M. R. 66.71. Oxidation of IV with $K_2Cr_2O_7$ gives the corresponding ketone, b_{12} 100-2°, d_4^{20} 0.9273, n_D^{20} 1.4700; semicarbazone, m. 160°. II gives by the Grignard reaction R"CH(OH)Et (R" = 2,5,6-trimethyl-3-cyclohexen-1-yl), b_{14} 116-8°, d_4^{20} 0.9240, n_D^{20} 1.4920, M. R. 56.16; R"CH(OH)Pr, b_{14} 118-20°, d_4^{20} 0.9112, n_D^{20} 1.4842, M. R. 61.35 and iso-BuCH(OH)R", b_{14} 132-4°, d_4^{20} 0.9163, n_D^{20} 1.4841 M. R. 65.70. All the compds. except the aldehydes derived from condensation with EtCHO have pleasant odors.

H. M. Leicester

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION



Rapid determination of dicyanodiamide. A. A. Berlin and Z. A. Zinov'eva. *J. Gen. Chem.* (U.S.S.R.) 17, 43-50(1947)(in Russian).—A rapid and accurate detn. of dicyanodiamide (I) by means of hydration in acid soln. to guanylurea nitr was developed. When I is heated on a steam bath (95-8°) for 15 min. with 10 parts of 2 *N*, *N*, and 0.5 *N* H_2SO_4 the hydration is 98-99% complete in the first 2 concns. but is incomplete in 0.5 *N* acid. The solns. after hydrolysis were made up to 200 cc. and were titrated with 0.05 *N* $Cu(OH)_2$ in 0.05 *N* NaOH, potentiometrically or with methyl orange (indicator); in the former case the Sb electrode was most satisfactory. The 0.05 *N* NaOH gave somewhat sharper end points. The results calcd. to I had to be multiplied by the factor 1.05 with the potentiometric titration and 1.09 with methyl orange. The method checked the Kjeldahl analyses to within 0.18%. Admixts. of urea, guanidine, or biuret do not interfere when a 15-min. heating period is used. Equally good results were obtained in the presence of phenol-CH_2O resins; in this case the resin was extd. with hot H_2O for 3-4 min., and the residue was used for the analysis. G. M. K.



63 26

738. **Rapid determination of dicyanodiamide.** A. A. Berlin and Z. A. Zinovieva (*J. Gen. Chem. Russ.*, 1947, 17, 43—50).—A method of determining dicyanodiamide in presence of urea, guanidine, phenol-formaldehyde resins, and other contaminants in based on the fall in acidity associated with the almost quant. conversion of dicyanodiamide into salts of the strong base, amidinourea, in acid solution. 1·6—2 g. of dicyanodiamide are dissolved in 60 ml. of 2*n*-H_2SO_4 at 60—65°, the solution is heated at 60—65° for 15 min., cooled, diluted to 1 L., and a 25-ml. portion is titrated with 0·05*n*-NaOH (*a* ml.). The % of dicyanodiamide + 4000 (*a*—*b*)/*kw*, where *b* is the no. of ml. of 0·05*n*-NaOH used for titration of an unheated control solution, *w* the wt. of the sample, and *k* an empirical coeff. R. T.
(1·06—1·09).

ZINOVIEVA, Z. A.

Berlin, A. A., and Zinovieva, Z. A., "On the Express-Method of the Dicyandiamide Analysis." (p. 49)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1947. Vol. 17. No. 1

ZINOV'YEVA, Z. A.

B. A. Kiselev, Z. A. Zinov'yeva, Ya. D. Avrasin and P. V. Davydov, "Obtaining a Hydrophobic Glass-textolite Based on Polyester Binders."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1958.
Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

S/661/61/000/006/070/081
D247/D302

AUTHORS: Kiselev, B. A., Zinov'yeva, Z. A., Avrasin, Ya. D. and Davydov, P. V.

TITLE: Applying silicoorganic compounds to production of constructional glass textolite

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh soyedineniy; trudy konferentsii, no. 6; Doklady, diskussii, resheniye. II Vses. konfer. po khimii i prakt. prim. kremneorg. soyed., Len. 1958. Leningrad, Izd-vo AN SSSR, 1961, 300-304

TEXT: Constructional purposes require high durability of the compounds under static bending and the dependence of this property on temperature was studied for various silico-organic compounds. Modifications of the silicones with organic resins were investigated. During the discussion in which A. Ya. Korolev (Moscow) took part, the possibilities of water repellence were mentioned. Methacryloxy-

Card 1/2

Applying silicoorganic compounds ... S/661/61/000/006/070/081
D247/D302

methyl triethoxysilane was recommended for its water repellent properties and also for improving mechanical and dielectric properties. The problem of combining water repellence, with a high angle of contact between water and the material, with good adhesive properties, was discussed. The effect of the lubricants found on industrial glass fibers was also mentioned.

Card 2/2

Zinov'yeva, Z. M.

YUSHKEVICH-GAVERDOVSKAYA, M.V., LAVROVSKIY, K.P., MIKHNOVSKAYA, A.A., ZINUV'YEVA, Z.M., AND YAKIMOCHKINA, V.I.

"Contact Transformations of Hexane and Cyclohexene Over an Aluminosilicate Catlayst," Vestnik Moskovskogo Universiteta, no. 11, 1948

ZINOV'YEVA, Z. N.

"The Practice of Employing a Fumigant Obtained From the Reaction of Chorosulfonic Acid and Calcium Hypochlorite as an Insecticide and Disinfectant on the Premises of the Main Administration of Food Concentrates, Ministry of the Food Industry USSR." Cand Med Sci, Central Inst for the Advanced Training of Physicians, 19 Oct 54. (VM, 24 Sep 54)

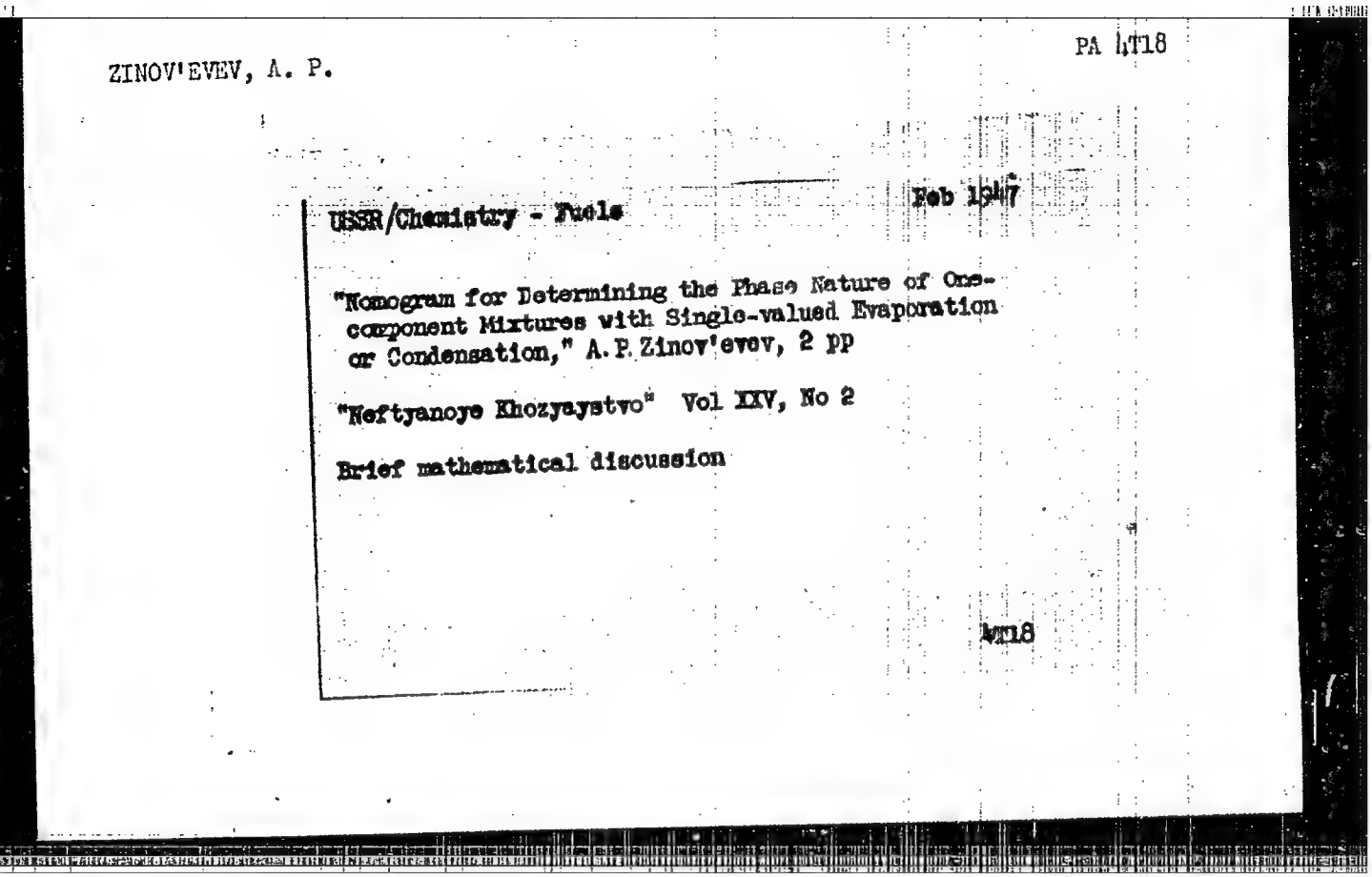
SO: Sum 432, 29 Mar 55

ZINOV'YEVA, V. N.

Experiments in the Chemotherapy of Lymphogranulomatosis
Sb. Nauch. Tr. Krasnoyarskogo Gos. Med. In-ta, No 3, 1953, pp 169-172

A number of patients with various forms of lymphogranulomatosis which had lasted from 3 months to 13 years, were given "duamin" (nitrogen-containing analog to mustard gas.) Some of the patients had received roentgen therapy previously. A course of duamin treatment consisted of ten intravenous injections of 1 ml of a 110% solution of caffeine 30 minutes before the duamin prevented secondary reactions. Most of the patients improved after the second injection. Temperatures became normal, shortness of breath, cough, and itching disappeared. At the end of the treatments the peripheral lymph nodes were again normal, and aches in the bones, sleeplessness, and tumorous growths in mediastinum and intestinal areas had decreased or disappeared. In some cases sleep therapy was added to the duamin treatment. (RZhBiol, No 1, 1955)

SO: Sum. No. 639, 2 Sep 55



ZINOV'EVEV, A. P.

PA 47T18

USSR/Chemistry - Fuels

Feb 1947

"Nomogram for Determining the Phase Nature of One-component Mixtures with Single-valued Evaporation or Condensation," A. P. Zinov'evev, 2 pp

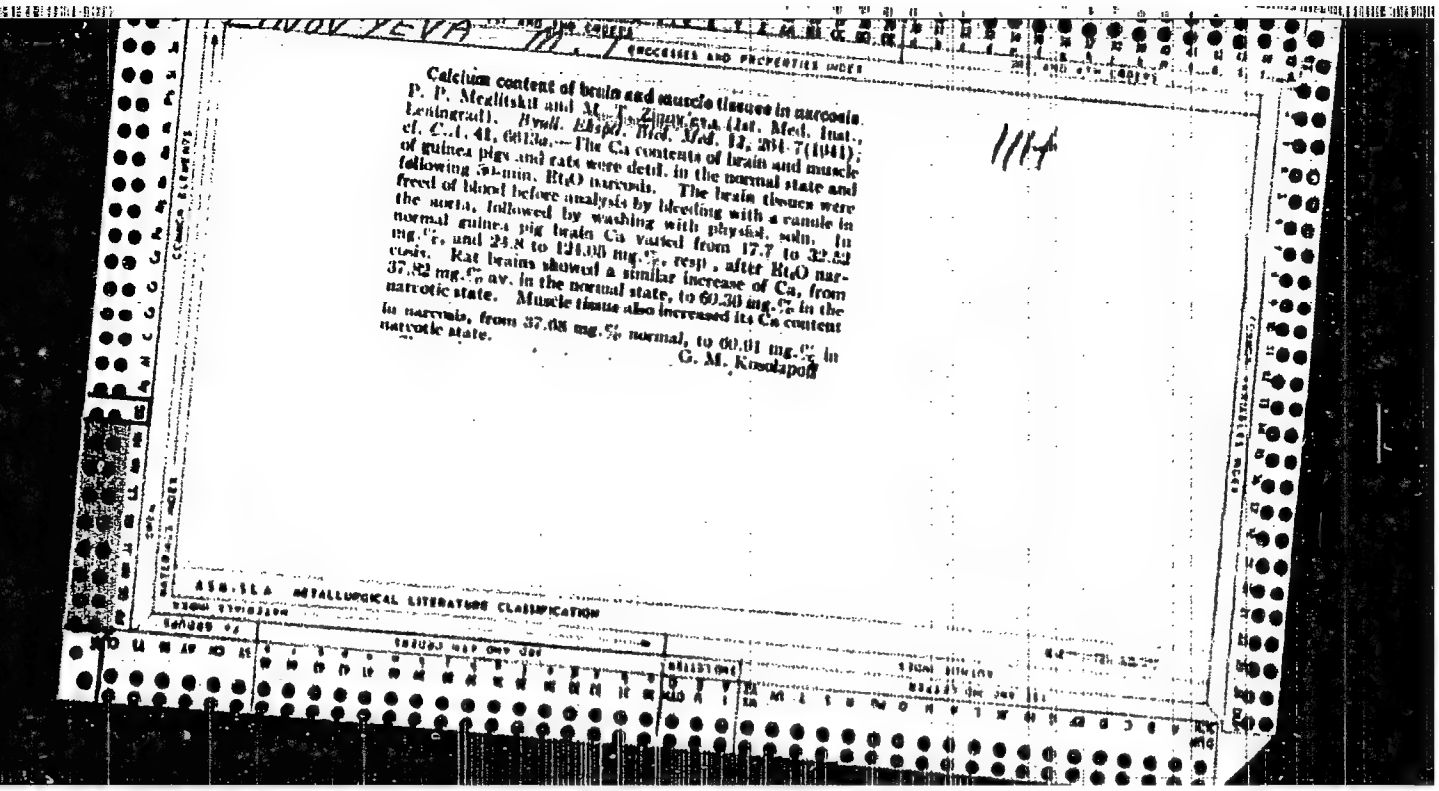
"Neftyanoye Khozyaystvo" Vol XXV, No 2

Brief mathematical discussion

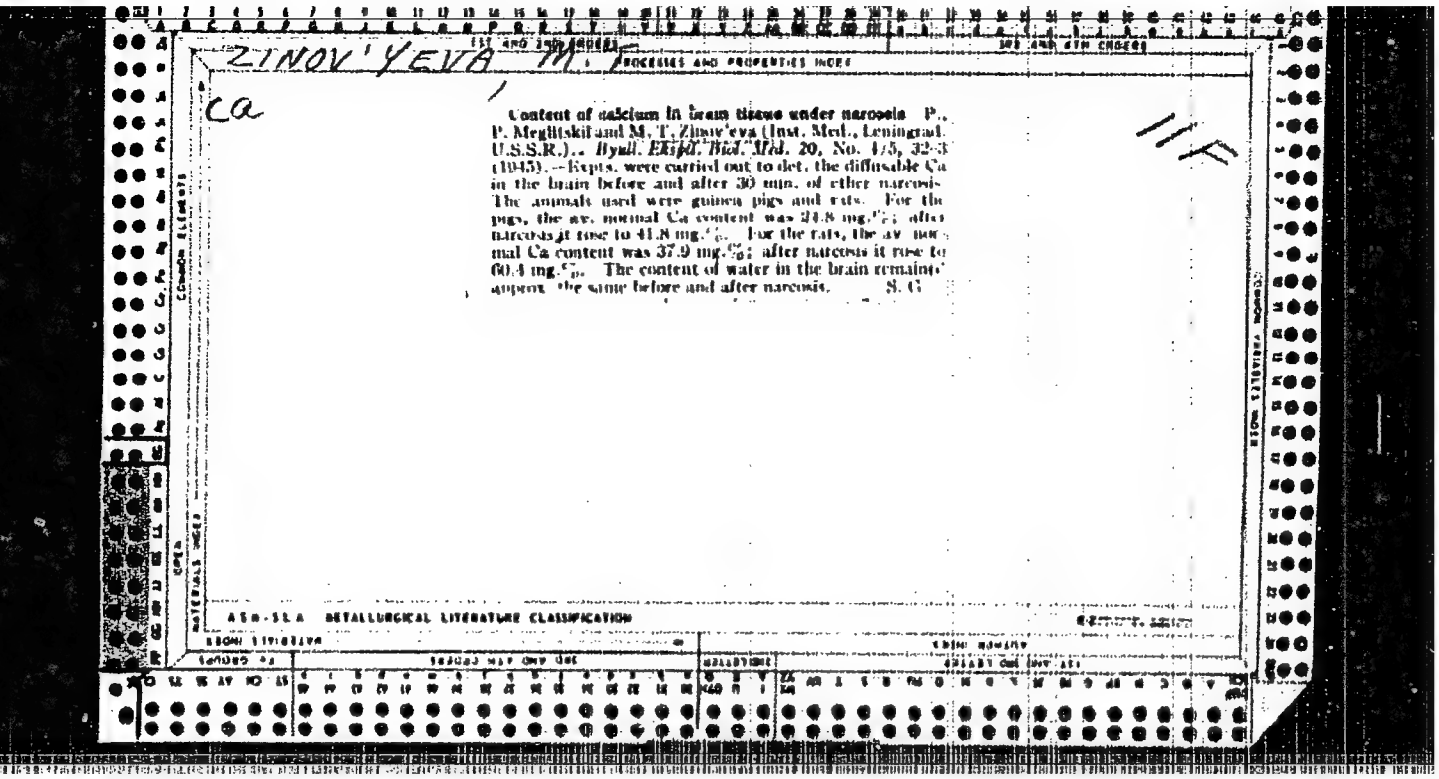
47T18

"Sur quelques produits de la synthese dientque avec le piperilene et la hexadience." Arbouzow, B., et Zinowjewa, Z., et Fink, I. (p. 2278)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii). 1937, Volume 7, No. 17.



Calcium content of brain and muscle tissues in narcosis.
P. P. Medlitskii and M. [illegible] Zinov'eva (Inst. Med. Inst., Leningrad). *Byull. Eksptl. Biol. Med.* 13, 284-7(1941); cf. *C.A.* 41, 6013a.—The Ca contents of brain and muscle of guinea pigs and rats were detd. in the normal state and following 30-min. H_2O narcosis. The brain tissues were freed of blood before analysis by bleeding with a canule in the aorta, followed by washing with physiol. soln. In normal guinea pig brain Ca varied from 17.7 to 32.52 mg.% and 23.8 to 124.30 mg.%, resp., after H_2O narcosis. Rat brains showed a similar increase of Ca, from 37.82 mg.% av. in the normal state, to 60.30 mg.% in the narcotic state. Muscle tissue also increased its Ca content in narcosis, from 37.08 mg.% normal, to 60.01 mg.% in narcotic state.
G. M. Kosolapoff

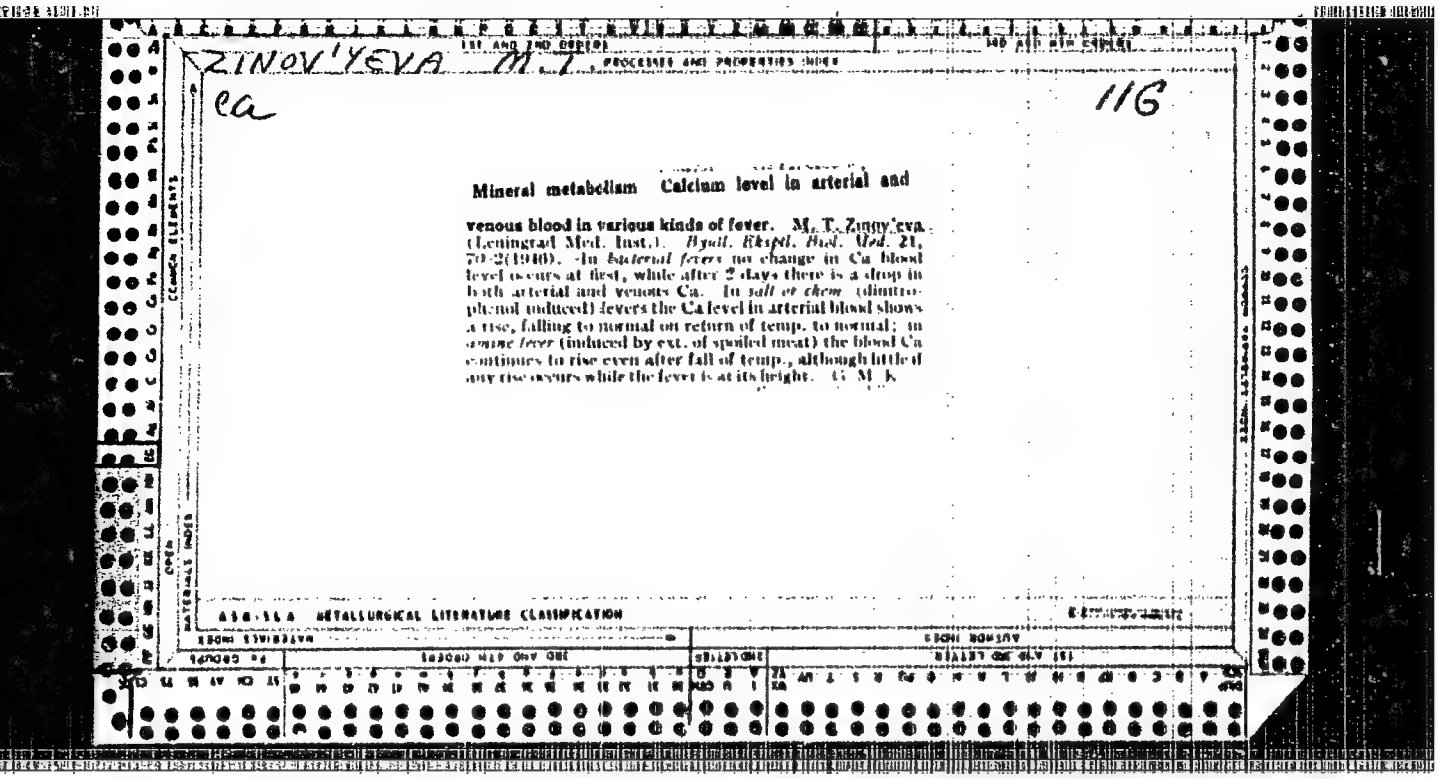


ZINOV'YEVA M.

Ca

Content of calcium in brain tissue under narcosis P. P. Meglitskii and M. T. Zinov'eva (Inst. Med., Leningrad, U.S.S.R.). *Byull. Eksptl. Biol. Med.* 20, No. 1/5, 32-3 (1945).—Expts. were carried out to det. the diffusable Ca in the brain before and after 30 min. of ether narcosis. The animals used were guinea pigs and rats. For the pigs, the av. normal Ca content was 24.8 mg.% ; after narcosis it rose to 41.8 mg.% . For the rats, the av. normal Ca content was 37.9 mg.%; after narcosis it rose to 60.4 mg.% . The content of water in the brain remained apparently the same before and after narcosis. S. G.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



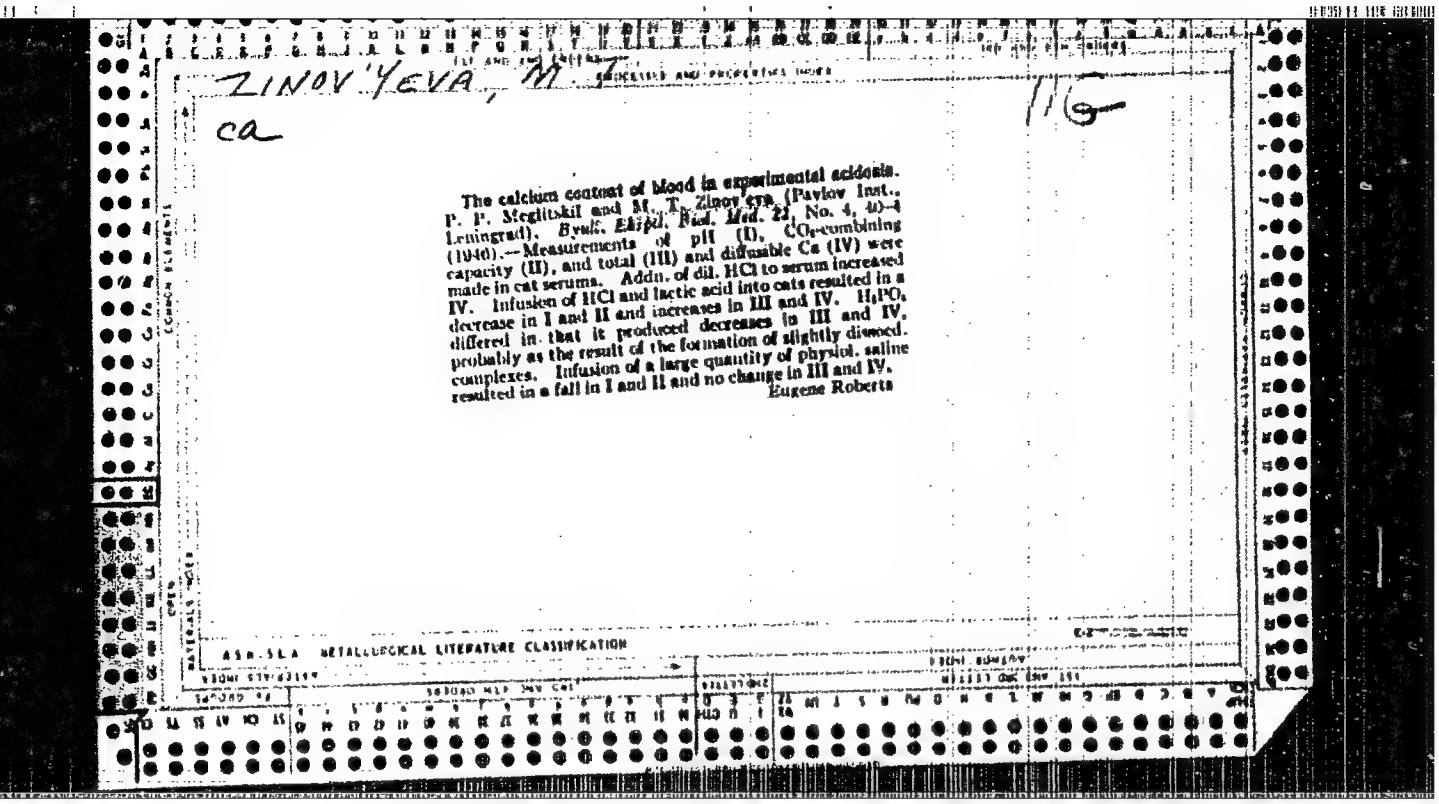
ZINOV'YEVA M. T.

ca

116

Mineral metabolism Calcium level in arterial and venous blood in various kinds of fever. M. T. Zinov'eva (Leningrad Med. Inst.). *Byull. Eksptl. Biol. Med.* 21, 70-2(1946). -In *bacterial fevers* no change in Ca blood level occurs at first, while after 2 days there is a drop in both arterial and venous Ca. In *salt or chem* (dinitrophenol induced) fevers the Ca level in arterial blood shows a rise, falling to normal on return of temp. to normal; in *amine fever* (induced by ext. of spoiled meat) the blood Ca continues to rise even after fall of temp., although little of any rise occurs while the fever is at its height. G. M. K.

A53-51A METALLURGICAL LITERATURE CLASSIFICATION



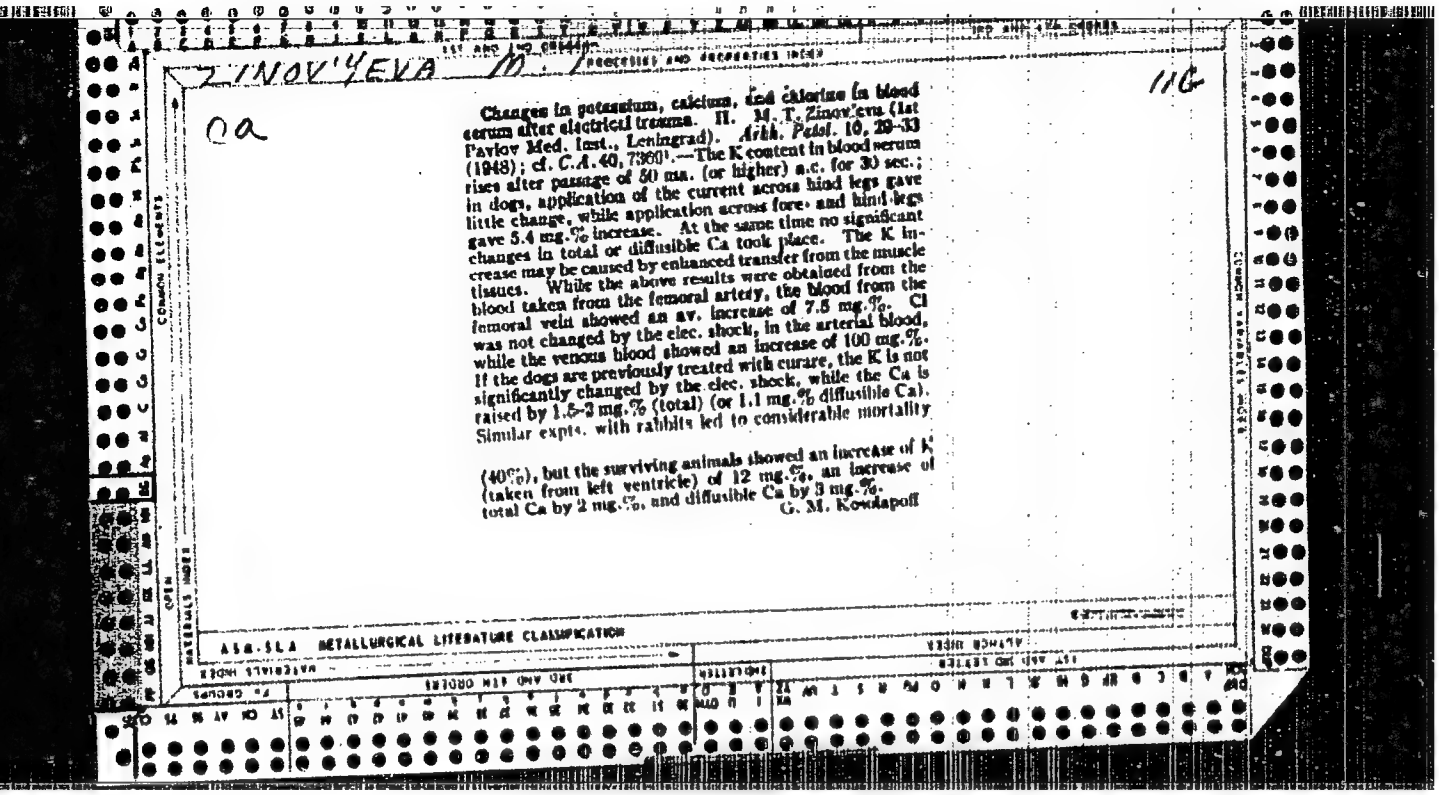
ZINOV'YEVA, M. T.

ca

116

The calcium content of blood in experimental acidosis. P. P. Meglitskii and M. T. Zinov'eva (Pavlov Inst., Leningrad). *Byull. Eksptl. Biol. Med.* 22, No. 4, 40–4 (1946).—Measurements of pH (I), CO_2-combining capacity (II), and total (III) and diffusable Ca (IV) were made in cat serums. Addn. of dil. HCl to serum increased IV. Infusion of HCl and lactic acid into cats resulted in a decrease in I and II and increases in III and IV. H_3PO_4 differed in that it produced decreases in III and IV, probably as the result of the formation of slightly dissocd. complexes. Infusion of a large quantity of physiol. saline resulted in a fall in I and II and no change in III and IV.

Eugene Roberts



ZINOV'YEVA M.

11G

Q a

Changes in potassium, calcium, and chlorine in blood serum after electrical trauma. II. M. T. Zinov'eva (Inst Pavlov Med. Inst., Leningrad). *Arkh. Patol.* 10, 29-33 (1948); cf. *C.A.* 40, 7360i.—The K content in blood serum rises after passage of 50 ma. (or higher) a.c. for 30 sec.; in dogs, application of the current across hind legs gave little change, while application across fore- and hind-legs gave 5.4 mg.% increase. At the same time no significant changes in total or diffusible Ca took place. The K increase may be caused by enhanced transfer from the muscle tissues. While the above results were obtained from the blood taken from the femoral artery, the blood from the femoral vein showed an av. increase of 7.5 mg.%. Cl was not changed by the elec. shock, in the arterial blood, while the venous blood showed an increase of 100 mg.%. If the dogs are previously treated with curare, the K is not significantly changed by the elec. shock, while the Ca is raised by 1.5-3 mg.% (total) (or 1.1 mg.% diffusible Ca). Similar expts. with rabbits led to considerable mortality (40%), but the surviving animals showed an increase of K (taken from left ventricle) of 12 mg.%, an increase of total Ca by 2 mg.%, and diffusible Ca by 3 mg.%.

G. M. Kondapoff

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

ZIKOV'YEVA-GOLITSYNSKAYA, M.T.

Adrenalin and acetylcholine in experimental reflexogenous hypertension. Arkh. pat., Moskva 14 no. 5:58-65 Sept-Oct 1952. (CLML 23:3)

1. Of the Department of Pathological Physiology (Head -- Prof. M. M. Pavlov), First Leningrad Medical Institute imeni Academician I. P. Pavlov.

ZINOV'YEVA-GOLITSYNSKAYA, M.T.

"The Adrenalin and Acetylcholine Content of the Blood Before and After Surgery on the Vegetative Nervous System in Patients Suffering From Hypertension," Vrachebnoye delo, No 6, 1953, pp 567-568

The adrenalin and acetylcholine content of the blood in persons with normal and increased arterial pressure, and in hypertensive patients before and after resection of abdominal nerves and removal of the semilunar ganglion, was studied. The adrenalin content was much higher in the hypertensive patients than in normal persons, but the acetylcholine content was disproportionately lower. After the operation, the adrenalin content at first decreased and then began to rise but did not reach the preoperative level. The acetylcholine content increased after the operation. A lowering of arterial pressure was observed more often in patients in the neurogenic phase than in those in the transitional stage of the disease. (RZhBiol, No 5, 1954)

SO: Sum. No. 536, 10 Jun 55

ZINOV'YEVA-GOLITSYNSKAYA, M. T., Doc of Med Sci -- (diss) "On the pathogenesis of hypertonic diseases. (The role of neurohumeral factors in the development of hypertonic diseases)." Leningra , 1956, 20 pp (First Leningrad Medical Institute im Pavlov), (KL, 33-57, 89)

ZINGV'YEVA, -GOLITSINSKAYA, M.T., kand.med.nauk

Some biochemical components of blood in hypertensives. Vrach.delo no.11:1213 N'58 (MIRA 12:1)

1. Kafedra patologicheskoy fiziologii Pervogo Leningradskogo meditsinskogo instituta.
(BLOOD--ANALYSIS AND CHEMISTRY)
(HYPERTENSION)

GOLITSYNSKAYA, M.T. (Zinov'yeva)

Experimental hypertension of cortical origin. Fiziol.zhur. 45 no.9: 1124-1131 S '59. (MIRA 13:1)

1. 1-y Leningradskiy meditsinskiy institut im. akademika I.P. Pavlova.
(HYPERTENSION exper.)
(REFLEX CONDITIONED)

GALITSYNSKAYA (ZINOV'YEVA), M. T., Doc Med Sci -- (diss) "Neurological and neurohumoral factors in the development of hypertonic sickness." Leningrad, 1960. 23 pp; (Inst of Physiology im I. P. Pavlov, Academy of Sciences USSR); 150 copies; price not given; list of author's works on pp 22-23 (15 entries); (KL, 26-60, 142)

ZINOV'YEVA

GOLITSYNSKAYA, M.T.

Effect of the functional state of the cerebral cortex on blood pressure, vascular reflexes, and certain humoral factors. Fiziol. zhur. 47 no.1:11-18 Ja '61. (MIRA 14:3)

1. From the Normal Physiology and Pathology Chair of the State University Uzhgorod.
(CEREBRAL CORTEX) (HYPERTENSION)

1. ZINSCHENKO, A. V.

2. USSR (600)

4. Horse Breeding—Kherson Province

7. Leading artificial insemination station for horses in Kherson Province. Konevodstvo 23 no. 1 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

Balz, Günther and Zinser, Werner

Thermal decomposition of metal fluoborate ammoniates.

Z. anorg. allgem. Chem., Vol. 221, 1935, pp. 225-48

Chem. Abs., Vol. 29, 2468-7

ZINSERLING, Andrzej, Mgr.inz.

Automatic steering systems.Pt.1. Techn motor 11 no.8:258-269 Ag '61.

ZINSERLING, E. V.

"The Phenomenon of Memory and Stabilization of Quartz Lattice."

paper presented at the Conf. on Mechanical Properties of Non-Metallic Solids, Leningrad, USSR, 19-26 May 1958

Inst. of Crystallography, Acad. Sci. USSR

ZINSERLING, E. V.

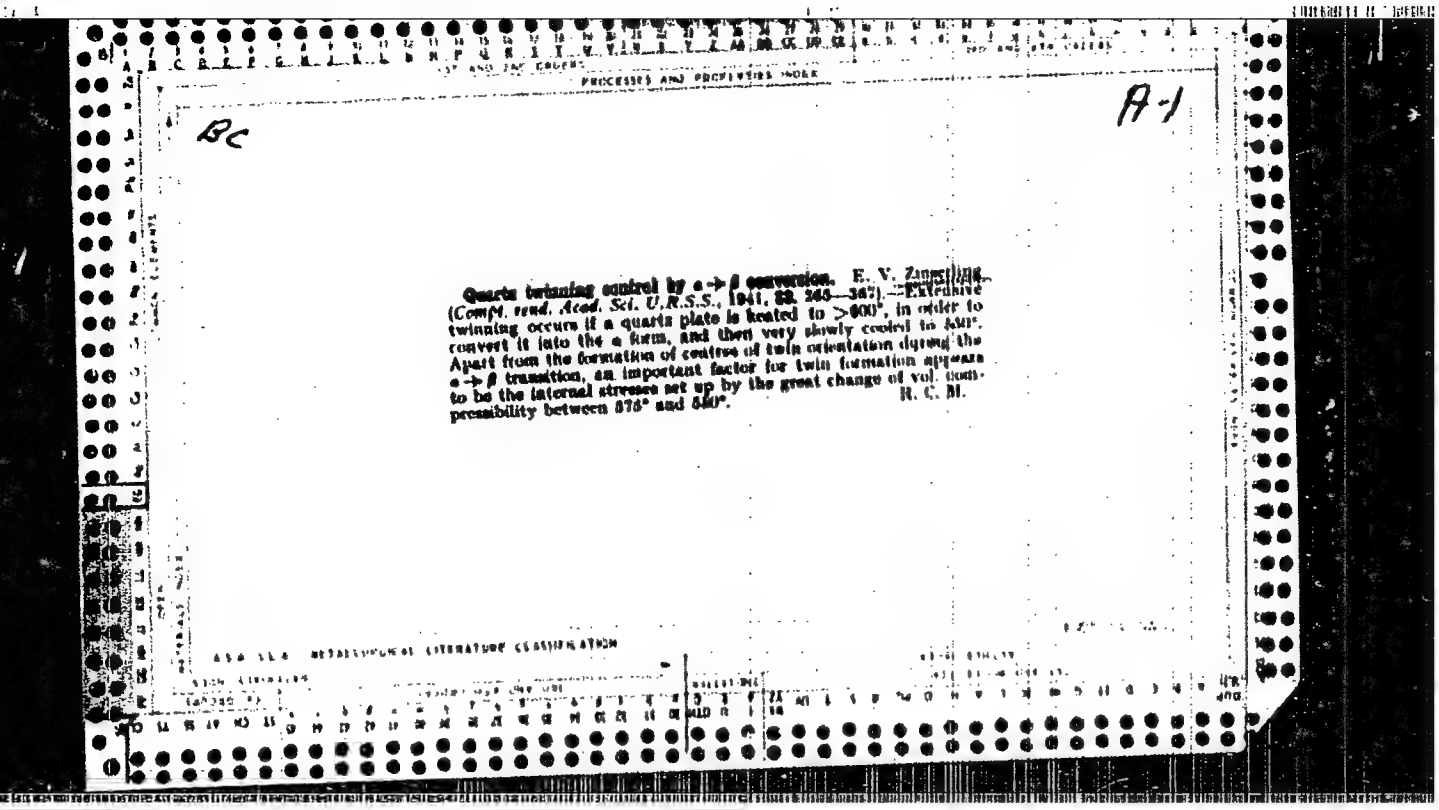
"Conversion of a Negative Quartz Rhombohedron Into a Positive One as a Result of B -- a -- B Transformation," Dok. AN, 33, No. 6, 1941. Crystallographic Lab., Mbr., Acad. Sci. c1941-.

ZINSERLING, E. V.

"Quartz Twinning Control Under, a -- B Conversion," Dok. AN, 33, No. 5, 1941

"Twinning of Quartz in the Electric Field," Dok. AN, 33, No. 6, 1941.

"Quartz Colouring As Depended on its Twinning Capacity Under a -- B Conversion," Dok. AN, 33, No. 5, 1941.



Quartz twinning control by α → β conversion. E. V. Zubov. (*Compt. rend. Acad. Sci. U.R.S.S.*, 1941, 32, 245—247). Extensive twinning occurs if a quartz plate is heated to >600°, in order to convert it into the α form, and then very slowly cooled to 550°. Apart from the formation of centres of twin orientation during the α → β transition, an important factor for twin formation appears to be the internal stresses set up by the great change of vol. compressibility between 575° and 550°. R. C. M.

ZINSERLING, Y. V.

ZINSERLING, E. V.

Institute of Crystallography of the Acad. Sci. of the USSR, Moscow.

"The Phenomenon of Memory and Stabilization of Quartz Lattice."
Paper submitted at.
Program of the Conference on the Non-Metallic Solids of Mechanical Properties. Leningrad
May 19 -26, 1958.

ZINSKIY, I. A.

PREDEIN, P.G.; YAKIMOVA, O.F.; ZINSKIY, I.A.; SPANCHAK, I.O.; NAZAROVA, N.K.
(Gubakha, Permskaya oblast').

Professional training of mathematics teachers in pedagogical institutes. Mat. v shkole no.2:24-27 Mr-Ap '58. (MIRA 11:2)
(Mathematics--Study and teaching)

SPAK, Michal, promovany ekonom; ZINTL, Rudolf, promovany, ekonom

Problems of the construction, renewal and maintenance of roads and bridges. Doprava 6 no.6:420-427 '64.

KRAL, J.; TAMASSY, E.; ZINTLOVA, M. NEUMANN, J.

Therapeutic exercise following cardiac surgery. Sborn.lek. 62 no.1:1-9 Ja '60.

1. Katedra telovychovneho lekarstvi fakulty vseobecneho lekarstvi Karlovy university v Praze, prednosta prof.dr. J. Kral. IV. interni klinika fakulty vseobecneho lekarstvi Karlovy university v Praze, prednosta prof.dr. M. Fucik.
(HEART surg.)
(EXERCISE THERAPY)

ZINTLOVA, MILADA.

SCHMID, Ludvik, Dr.; ZINTLOVA, Milada

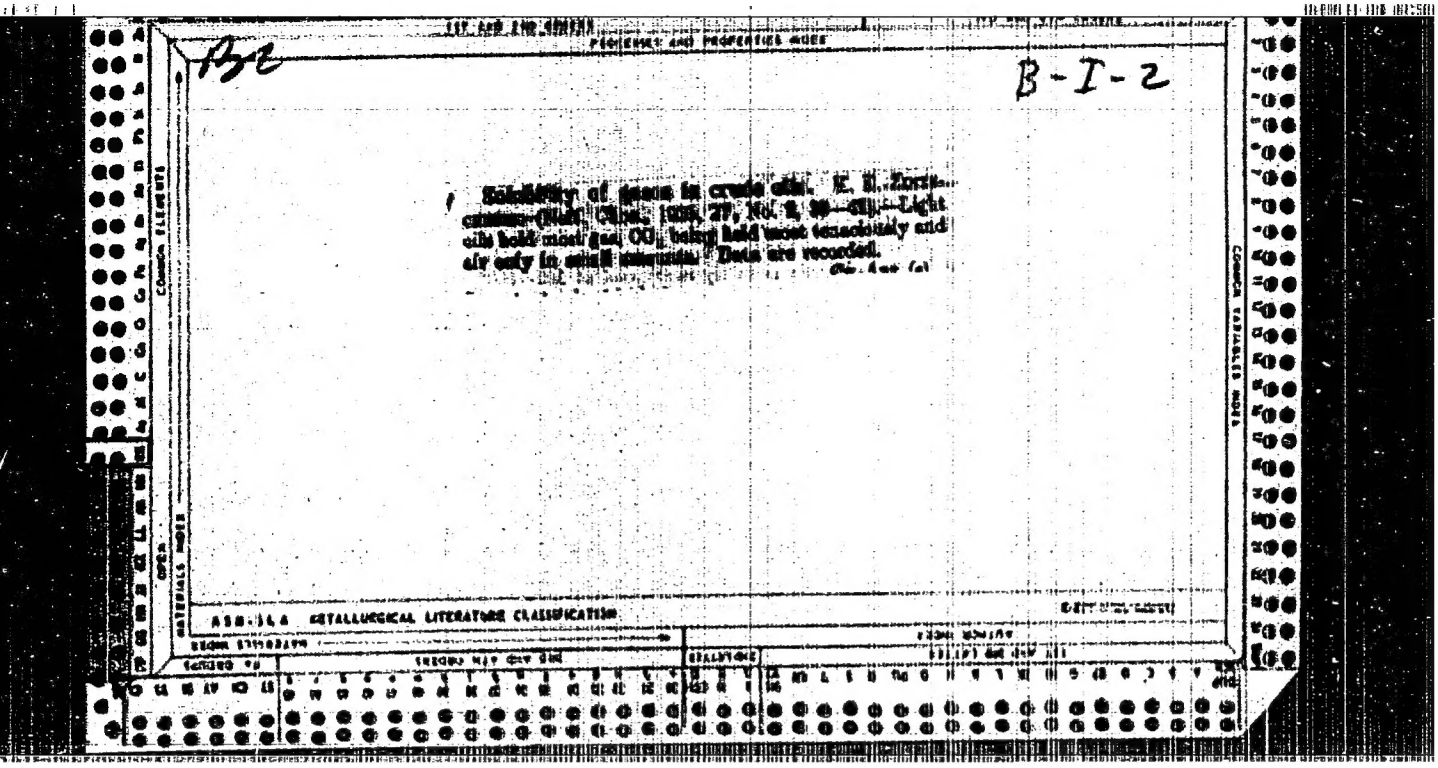
Exercise therapy in diseases of the respiratory tract. Cas. lek. cesk. 93 no.29:798-806 16 July 54.

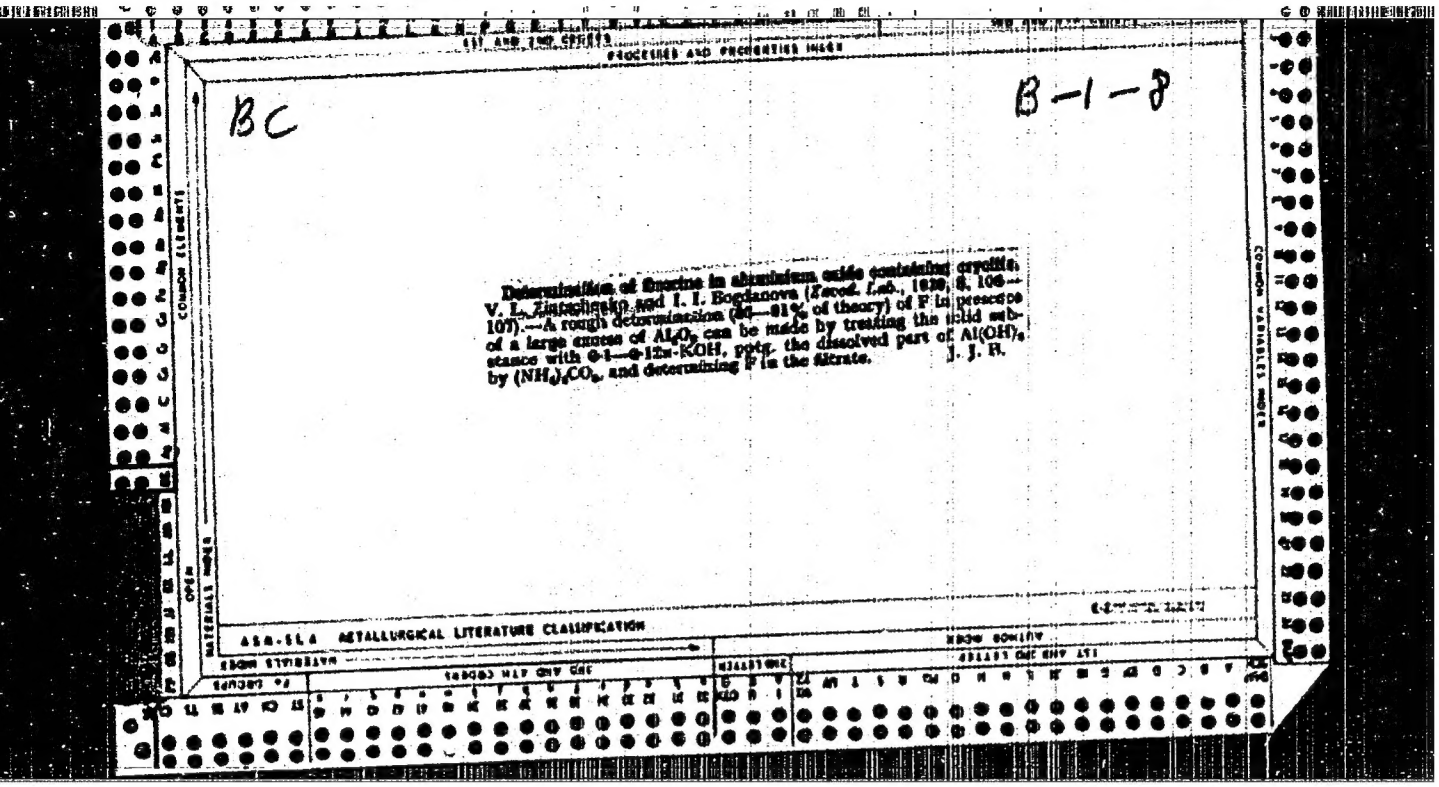
1. Z katedry telesne vychovy a telovychovneho lekarstvi KU v Praze.
(RESPIRATORY TRACT, diseases,
ther., exercise)
(EXERCISE THERAPY, in various diseases,
resp. tract dis.)

ZIKTLOVA, M.; MARATKA, Z.

Exercise therapy of gastrointestinal diseases. Prakt. lek., Praha 33 no.1:12-14 5 Jan 1953. (CIML 24:3)

1. Of the Clinical Department (Head--Prof. J. Kral, M. D.) of the Institute of Physical Education and of the Second Internal Clinic (Head --Prof. A. Vancura, M. D.) Prague.





BC

B-1-8

Determination of fluorine in aluminium oxide containing cryolite. V. L. Zinkevichenko and I. I. Bogdanova (Zavod. Lab., 1939, 8, 106—107).—A rough determination (80—81% of theory) of F in presence of a large excess of Al_2O_3 can be made by treating the solid substance with 0·1—0·12N-KOH, pptg. the dissolved part of $Al(OH)_3$ by $(NH_4)_2CO_3$, and determining F in the filtrate. J. J. R.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZINTSOV, V.V.

Introduction of group methods in foundry practice. Lit. proizv. no.7:42-43 Jl '63. (MIRA 17:1)